

100

<210> 2185
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2185
 ngaatatcca tgcagcagct cgctcgacaat tttgacgggtg ccatccctga cgatcttgac
 60
 tctcttgtga ccctgcccgg agtcgggtcgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttccggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccg
 240
 tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggccggcggcg ctgtcactcg
 300
 cggcgctcctg cctgccccgt atgcccgggtt gccgagtggt gcccgctctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg aggggggatga
 420
 acgttttctgg cgcgggtgatg gccgccttga tgtttgctgg ctgcggggga gatgccccga
 480
 tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggccgacg atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
 660
 tgaagatctg ggcgtcgtgg tgctgacat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2186
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115					120						125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130					135									

<210> 2187
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2187
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 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
 120
 cgcattcgatc caccgagggct atcggcgcca aagaagttgc cggggcaaaa tcccggcgag
 180
 gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagg
 240
 ctcatgagga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
 300
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
 342

<210> 2188
 <211> 51
 <212> PRT
 <213> Homo sapiens

Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
1			5						10					15	
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
		20					25					30			
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
	35					40					45				
Val	His	Pro													
	50														

<210> 2189
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 2189
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
 60
 cgtttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
 120
 ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gcctgcccga
 180
 gggtgcccga ggaggctgcc caggtgatca gtgcctgaca ccgggctgac ttgcaggtc
 240

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tggggcgcc tgggttacc gcgtcgggcc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgccaac
 540
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgagc cgagtcgtc
 600
 tcttttgcgt ttggcgccg cgccacagt cttgacacca atgtacgtc cctcatcgt
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagtc
 720
 gccgacgctg tggttcccg cgaagacgtc cgagcggcca agtggcggt ggcgtcgatg
 780
 gaattggggg cactggtatg cacggcgcg tctccgagt gtgaggtctg cccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg cgggacaatg ccccgccccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtccgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggctctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcgagatcc atcgagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10					15		
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20				25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

```

      50              55              60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
65              70              75              80
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
      85              90              95
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
      100              105              110
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
      115              120              125
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
      130              135              140
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
145              150              155              160
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
      165              170              175
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
      180              185              190
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
      195              200              205
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
      210              215              220
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
225              230              235              240
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
      245              250              255
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
      260              265              270
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
      275              280              285
Leu Ile Ser Leu
      290

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<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

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nnacgcgtcg agaatctcta ctctgcccgc aacaacgtcc ggcttcgtca ggctcacgat
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gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac
120
tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
180
agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
240
cgcgaggagg cctcgcagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
300
gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc
360
aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
420
cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag
480

```


gctgggattg ccggtggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactctctc tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgccttgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

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<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

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naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgtcat gtcacctggc
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gacggtgtgg cacaccccaa ctttggcaat atcgccacg acctggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtgccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gtcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gtcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

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<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

```

Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100          105          110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115          120          125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130          135          140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145          150          155          160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

```

<210> 2197
 <211> 351
 <212> DNA
 <213> Homo sapiens

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<400> 2197
acaagtccgt cgacgattcg ctttccggag gcggggccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtcgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 2198
Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1          5          10          15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
20          25          30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
35          40          45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
50          55          60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65          70          75          80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
85          90          95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100          105          110
Gly Ile Asp Gln Arg
115

```

<210> 2199
 <211> 457

<212> DNA
 <213> Homo sapiens

<400> 2199
 agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagccccggg agaagggtcg gaaggagggg actggacgtg cggagaattc cccctaaaa
 120
 ggcagaagcc cccgccccca cctccgagc tccgttcggg cagagcgctt gcctgcctgc
 180
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggcggccccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaagtcc cgccggc
 457

<210> 2200
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 2200
 Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
 1 5 10 15
 Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
 20 25 30
 Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
 35 40 45
 Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
 50 55 60
 Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
 65 70 75 80
 Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
 85 90 95
 Ser Glu Gly Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
 100 105 110
 Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
 115 120 125
 Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
 130 135 140
 Leu Leu Trp Gly Lys Ser Arg Arg
 145 150

<210> 2201
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgcgtggat ggtggcgca aattacatgt ttgtggtaac
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 aaccttgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
		20						25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctgggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccgggga
 120
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

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Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
      20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
      35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
      50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
      85

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<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

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gnnnnnngng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcacgc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

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Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
      20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
      35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
      50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

1627

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

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ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```


Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala

85 90

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<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
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```

<400> 2211
ctgaccacat ctccgacgat cctagacctc tgttctgcat ctcggaacac accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccggg
120
aggaaggagg ggaaggggat ggatccatgt actttggggg tggagaaatg ggggacagca
180
agtctcctca acccaaatac agcccccttg ggaggctcct gccccgtctc tgtggatagt
240
gagcccagct gcaagggcg gctgccaggg acaaaccac caaaaggaaa gatgttgtag
300
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
420
atgcgcaaag tcatgcccat caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493

```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

```

<400> 2212
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
 1          5          10          15
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
          20          25          30
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
          35          40          45
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
          50          55          60
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
65          70          75          80
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
          85          90          95
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
          100          105          110
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
          115          120          125

```

$$\begin{array}{ll} \langle 210 \rangle & 2213 \\ \langle 211 \rangle & 327 \end{array}$$

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
 60
 gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgcgggc tcggcgctgc gcatcatccg ggcgcgctg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
 240
 atgccccggt tggtegacgc gatcacgtca cgggacgagg aagccgcca gcgcgactg
 300
 ctcgaccaca atcgagcgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10					15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
		20					25					30			
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35				40				45					
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50				55				60						
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65				70				75					80		
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85					90					95		

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgac
 60
 ccgaagctgg aaacccttaa gaaggaggcg gcgtccggtc agaacaagat caccagtagc
 120
 acccggtacc tcaactctcg gcttggcctg ttgcaggcaa cggccttcgt cagcgttgcc
 180
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt
 300
 gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
 60
 atgacgtggc tcgatgacga cgtgggccc gacctgttga atcaggctga ttccatggac
 120
 catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag
 180
 acctgtgccg tggtgctga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgc gatgcgggag
 300
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgtccgc tgagtgttgg cggcttgcta
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
          20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
          35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
          50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
          85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
          100          105          110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
          115          120          125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
          130          135          140
Phe Ala Gln Ser
145

```

<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219

```

acgcgtaccg tcgttggcat gacgctcctg ccaactggaaa ttgggtgtgc attcagctac
60
ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaag ccgttgggag
120
tggtcgatec ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
180
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
240
gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag
300
cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca
360
gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc
420
atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcca
480
cccgaaggaa ttcttggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc
540
tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
600
gcgaagggcg cgggtgtagg tctccccggg gtcggtgtg gtcctctctc tgcgtgacgc
660

```

agagccgtgt gatgaggcga agtcatga
688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
1 5 10 15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
60
aaagaagagc aaaccgcat cgctaacgct ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aacaaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaataa cgagggttgt atgagccaca aggtgaattt agtgcattgag ctggataaagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atgggtcacia gagaacctaa atgcgctgat gaggattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tgggttttca ttatcataat gaaccgtag
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu
 1 5 10 15
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
 cggccgccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg
 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cggtgccacg ccggtgaaga
 120
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgtcctgc gctgatatag gcctggagat gcccctggc gtgtcgggca acctcgtagt
 240
 tcaggccgctc gagcaccaca aggatgacgt tgtgtctcat aaggggagac gctccgcaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc
 360
 gctccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat
 420
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttccacgc
 480
 gt
 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

```

      1           5           10           15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His
      20           25           30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
      35           40           45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
      50           55           60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
      65           70           75           80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
      85           90           95
Asp Ala Gly Leu Thr Thr Ala Ala Ala
      100           105

```

<210> 2225
 <211> 753
 <212> DNA
 <213> Homo sapiens

<400> 2225
 nacgcgtctg atccacacgg gccactgacg tggcggttatg acagggagcg ggccggtgccc
 60
 ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
 120
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
 180
 aaggagggca tcggccacac aggttgggtc gtctcggacg agtcggggcc ggtgggcaac
 240
 gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc
 300
 agtcgggtca gtgttgggcc gcgcgcggag tacatcgctg agatctatgg aaccgacgga
 360
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat
 420
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
 480
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggtcgt tgaggctgcg
 540
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg
 600
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctcgc ggggaccatg cctggcatga
 660
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
 720
 gaccaggcct ggcggcacaa ccaggtcgcc ggc
 753

<210> 2226
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 2226
 Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

```

<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

```

ggatccgaaa cgttgggagc ataaagcagc atggcgacc tactgaagac ggtggtggct
60
ggctgttcat gtcctttect tagcaacttg gggctcctcta aggttctacc tgggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaattccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctcctgc ggggggtccag gccctgggtca agcagggctt caatgttgtc
300
gtggaatcag gcgcaggcga agct
324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```



```

      1           5           10           15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20           25           30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85           90           95
Glu Ala

```

<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
cccacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
120
tagctcagcc ccttctctgcg tgcctggccc tgggaggatg ccatccccag tcccctcttc
180
tgggcctctg tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccagcagg
300
cctcggtccc gccaaagtgt
320

```

<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
  1           5           10           15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20           25           30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65           70           75           80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85           90

```

<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

```

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
60
tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cgggggtgaca ggggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcattttgtg ggataccac cactgtccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcaactgtgaa gccagtgttg ttttacagat gaggaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtcct ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgccccat
540
ggccccgat gccacggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct ttttctatt ccttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

```

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

```

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1           5           10           15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20           25           30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35           40           45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50           55           60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65           70           75           80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85           90           95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100          105          110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115          120          125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130          135          140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

145 150 155 160
 Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp
 165 170 175
 Thr

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

acgcgtgatg atcgggaatg tgaaaatcag ctggttctgc tgcttggttt caacaccttt
 60
 gatttcatta aagtgttgcg gcagcacagg atgatgattt tatactgtac cttgctggcc
 120
 agtgcacaaa gtgaagctga aaaggaaagg attatgggaa agatggaagc tgaccagag
 180
 ctatccaagt tctctacca gttcatgaa accgagaagg aggatctgat ccgagaggaa
 240
 aggtcccgga gagagcgagt gcgtcagtct cgaatggaca cagatctgga aaccatggat
 300
 ctcgaccagg gtggagaggc actggctcca cggcaggttc tggacttga ggacctggt
 360
 tttacccaag ggagccactt tatggccaat aaacgctgtc agcttcctga tggatcctcc
 420
 cgtcgccagc gtaagggcta tgaagagggt catgtgcttg ctttgaagcc caagcccttt
 480
 ggctcagaag aacaattgct cccggtggaa aagctgcaa agtatgcca ggctgggttt
 540
 gagggcttca aaacgctgaa ccggatccag agtaagctct accgtgctgc ccttgagacg
 600
 gatgagaatc tgctgctgtg tgctcctact ggtgctggga agaccaacgt ggccctgatg
 660
 tgcattgctc gagagattgg gaaacacata aacatggacg gcacaatcaa tgtggatgac
 720
 ttcaagatta tctacatagc tcccatgcgc tccctggtcc aggagatggt gggcagcttt
 780
 ggaaagcgcc tggccacata tggcatcact gttgctgagc tgactgggga tcaccagcta
 840
 tgcaaggagg aaatcagtgc cacacagatt atcgtctgca cccctgagaa gtgggacatc
 900
 atcacacgca agggcgggga gcgcacctac acccagctgg tgcgactcat tgtcttggat
 960
 gagatccatc ttctacatga tgacagaggt cctgtcttag aagctttggt ggccaggggc
 1020
 atccgaaaca ttgagatgac ccaagaagat gtccgactca ttggtctcag tgctaccctc
 1080
 cccaactatg aagatgtggc cacccttctg cgagtcgacc ctgctaaggg cctcttctac
 1140
 tttgataaca gtttccgccc cgtgcctctg gaacaaacat atgtgggcat cacagagaaa
 1200
 aaagctatca aacgtttcca gatcatgaat gaaatagtct atgagaaaat catggaacat
 1260

gctggaaaaa atcagggtgct cgtgtttgtc cattctcgca aagaaactgg gaagacagca
1320
agggcaatcc gtgacatgtg tctggagaag gacactttgg gtctgtttct tcgcgagggg
1380
tctgcctcca ctgaagtcct tcgtacagaa gcagagcagt gcaagaactt ggagctgaag
1440
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1500
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 <211> 1701
 <212> PRT
 <213> Homo sapiens

<400> 2234
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 20 25 30
 Pro Lys Tyr Ala Gln Ala Gly Phe Glu Gly Phe Lys Thr Leu Asn Arg
 35 40 45
 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu
 50 55 60
 Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met
 65 70 75 80
 Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile
 85 90 95
 Asn Val Asp Asp Phe Lys Ile Ile Tyr Ile Ala Pro Met Arg Ser Leu
 100 105 110
 Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly
 115 120 125
 Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu
 130 135 140
 Ile Ser Ala Thr Gln Ile Ile Val Cys Thr Pro Glu Lys Trp Asp Ile
 145 150 155 160
 Ile Thr Arg Lys Gly Gly Glu Arg Thr Tyr Thr Gln Leu Val Arg Leu
 165 170 175
 Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val
 180 185 190
 Leu Glu Ala Leu Val Ala Arg Ala Ile Arg Asn Ile Glu Met Thr Gln
 195 200 205
 Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu
 210 215 220
 Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr
 225 230 235 240
 Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly
 245 250 255
 Ile Thr Glu Lys Lys Ala Ile Lys Arg Phe Gln Ile Met Asn Glu Ile
 260 265 270
 Val Tyr Glu Lys Ile Met Glu His Ala Gly Lys Asn Gln Val Leu Val
 275 280 285
 Phe Val His Ser Arg Lys Glu Thr Gly Lys Thr Ala Arg Ala Ile Arg
 290 295 300
 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly
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 Ser Ala Ser Thr Glu Val Leu Arg Thr Glu Ala Glu Gln Cys Lys Asn
 325 330 335
 Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala

1644

770	775	780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His		
785	790	795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		800
	805	810
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		815
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		830
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		845
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		860
865	870	875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		880
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		895
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		910
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		925
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		940
945	950	955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		960
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Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		975
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		990
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Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		1005
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Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		1020
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Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		1040
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		1055
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Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		1070
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Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		1085
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		1100
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Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		1120
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		1135
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		1150
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		1165
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		1180
1185	1190	1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		1200

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Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
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Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
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Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
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Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
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Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
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Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
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Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
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Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
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His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
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Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
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Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
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Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
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Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
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Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
1425		1430		1435	1440
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
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Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
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Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
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Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
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Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
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Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
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Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
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Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
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Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

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 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
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 <211> 586
 <212> DNA
 <213> Homo sapiens

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<210> 2236
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 <212> PRT
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 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

85 90 95
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 Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
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<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

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 Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
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 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
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 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
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 <211> 623

<212> DNA

<213> Homo sapiens

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<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

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Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
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Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
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Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
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Ser	Ser	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala	
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Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
		130				135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
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Lys Ala Leu Arg Ala Lys Thr Asn Thr Tyr Ile Arg Thr Pro Gly Arg
          35          40          45
Gly Glu Glu Pro Val Phe Met Val Thr Gly Arg Arg Glu Asp Val Ala
          50          55          60
Thr Ala Arg Arg Glu Ile Ile Ser Ala Ala Glu His Phe Ser Met Ile
65          70          75          80
Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala
          85          90          95
Leu Pro Gly Gln Val Thr Ile Arg Val Arg Val Pro Tyr Arg Val Val

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Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

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<210> 2243
 <211> 384
 <212> DNA
 <213> Homo sapiens

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<400> 2243
gaattcagca tttaaatgtc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggttaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcttggtg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggccct tgga
384

```

<210> 2244
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgctgctga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtatt
 120
 gagggccaca agcatttcac gtggcgctcat ggcgaggctg acgcgggtggg catgggtgttt
 180
 gcggccgaac tgctgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggctcgcca tgatcgtcga ccctgacgag
 420
 gccgcttttag ccgagtgtta cgaccgggtg tccgcacggt aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccga
 600
 cttaagtcca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
 130 135 140
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg
 145 150

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2247
 gggcggttcgc ctccagggtt ctccccgaca ctggatgcc aacctgccag gggcagaagg
 60
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
 120
 cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg
 180
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgcctctctg ctgggttgca
 240
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
 300
 tgtgccgtgt gagccatccc cctg
 324

<210> 2248
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2248
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1 5 10 15
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
 20 25 30
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
 35 40 45
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
 50 55 60
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
 65 70 75 80
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
 85 90 95
 Val Gly Glu Asn Pro Gly Gly Glu Arg
 100 105

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2249
 gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattcccac
 120
 ggtggaaacc gcgccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggt tagcacccctc
 240
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctggggag gaactggggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2250
 Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro
 1 5 10 15
 Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys
 20 25 30
 Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro
 35 40 45
 Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Val Ser Thr
 50 55 60
 Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr
 65 70 75 80
 Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu
 85 90 95
 Tyr Thr Pro Cys Tyr Pro Val Phe
 100

<210> 2251
 <211> 654
 <212> DNA
 <213> Homo sapiens

<400> 2251
 acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca
 60
 gtggaatagt caggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggt ataacgccga agcggtaaaa
 180
 attttaatth ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaattca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtcaa cgttatattt tgatagtttg acggttaatg ctggtaatgg tggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt tttgcctggt tggttcgctt tgagtcttct
 540
 tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggtatg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35					40				45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70					75				80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
				85					90					95	
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
			115				120						125		
Ile	Asp	Val	Leu	Pro	Arg	Thr									
			130			135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagacc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca
 60
 aatatggctc atgcaacttc tggccaaagg ggctcacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgacgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttcgagg tgcattgatga agtgatactg
 240
 gaagggcctt cagagtctgc ggagtnngcc aagtccatag ttgttgagtg catgtctaag
 300
 ccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

<400> 2260															
Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val
1				5				10					15		
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly
			20					25					30		
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala
		35					40					45			
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln
		50				55					60				
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val
65					70					75				80	
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr

	85		90		95										
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu
	100					105							110		
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu
	115					120							125		
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg			
	130					135						140			

<210> 2261
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 2261
 ngctagctgc tgctcctgag gatcgccgc agaatttgc tgccgatctg tccgggttgc
 60
 ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
 120
 tgtcgggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
 180
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg
 240
 acgatgccgg gaggtctcttc gacaagcttc actgaacggt gttcaattgg tcccaacggc
 300
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat
 360
 gggttccagg ccaccgacct gggtcttctc gcggtctttg cagccctcat tgctgtgcta
 420
 gccgtcatcc cgccgatgtt catggtgggg gcggtccctt ttgcccttca gatggttgcc
 480
 gtcacgtctg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggcttgtat
 540
 atccttgtcg gcgcgctggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
 600
 ctggtgggtc cactggtggt gtatctatgg ggatggctga tcggcgcttt cgtggcgggt
 660

<210> 2262
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2262
 Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
 1 5 10 15
 Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
 20 25 30
 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
 35 40 45
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
 50 55 60
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
 65 70 75 80
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

```

<210> 2263
 <211> 491
 <212> DNA
 <213> Homo sapiens

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<400> 2263
naccggttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccg tagtccccgt
60
tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcacc cggctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc gggttatcccg attgcttttag taggagcatg ggcggctatg
240
ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttcccgg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcatc caccaaccac
480
tcgacgtgca c
491

```

<210> 2264
 <211> 163
 <212> PRT
 <213> Homo sapiens

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<400> 2264
Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
1      5      10      15
Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
      20      25      30
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
      35      40      45
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
      50      55      60
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
      65      70      75      80
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
      85      90      95
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
      100      105      110
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

```


115 120 125
 Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
 130 135 140
 Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
 145 150 155 160
 Ser Thr Cys

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 2265
 ccattgggaat agccaacac ggaatgatct actgtataac ttgcctgcca tcaggaaaga
 60
 gtcaaacacgg cagacacatg ctggcagaaa cctgctgga gttgccctg agcattgatg
 120
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
 180
 cggaagggtc cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
 240
 tcaactcatt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
 300
 tttagcacgt gactgggacc actggaca
 328

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2266
 Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
 1 5 10 15
 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
 20 25 30
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
 35 40 45
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
 50 55 60
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
 65 70 75 80
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
 85 90 95
 Thr Pro Asn Leu
 100

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaaagttg tccactccct gtcagatggc
 60
 agaccatgga gggctaagtc aggtctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgaggagacc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt ctttaaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5					10					15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35					40					45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
			85						90						

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatatc cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgctg ctccttgctg
 420

gctgatccgg tgcaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaaccg cacctcggaa
 120
 gaaggcatgg cgccgttgac ctccgacgcg gtggcgcggt tggccactta cagcgcacgg
 180
 ctggcgggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc
 240
 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaggc caccggtacc gggcggtgat cggcgcggat tctcgacgac
 360
 atgctcgctg gggtcactct gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg
 420

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<210> 2272
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2272
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 35 40 45
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 50 55 60
 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
 65 70 75 80
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
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 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
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 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
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 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
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 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
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<210> 2273
 <211> 4355
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
			20				25						30		
Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50				55				60				
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
65					70				75					80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
				85					90					95	
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
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145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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			20					25				30			
Pro	Thr	Ala	Met	Thr	Pro	Pro	Val	Leu	Thr	Thr	Ala	Glu	Thr	Ser	Val
			35				40					45			
Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
			50				55				60				
Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
65					70					75				80	
Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
				85					90				95		
Thr	Ile	Ala	Ser	Glu	Thr	Thr	Leu	Ser	Ser	Lys	Ser	His	Gln	Ser	Thr
			100					105					110		
Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
			115				120					125			
Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

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<210> 2277
 <211> 640
 <212> DNA
 <213> Homo sapiens

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<210> 2278
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2278
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 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
 35 40 45
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
 50 55 60
 His Ala Thr Pro Gln Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
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 Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
 85 90 95

<210> 2279
 <211> 331
 <212> DNA
 <213> Homo sapiens

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<210> 2280
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2280
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 20 25 30
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 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
 50 55 60
 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
 65 70 75 80
 Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
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<210> 2281
 <211> 409
 <212> DNA
 <213> Homo sapiens

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 300

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 409

<210> 2282
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2282
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 20 25 30
 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly
 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
 50 55 60
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro
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 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg
 85 90 95

<210> 2283
 <211> 404
 <212> DNA
 <213> Homo sapiens

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<210> 2284
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2284
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 His Leu Leu Val Val Phe Phe Leu Val Gly Ala Val Pro Thr Ile Ser

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Ser Lys Phe Arg Arg Lys Phe Ile Val Lys Tyr Ser Ala Thr Ser Phe
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Leu Leu Cys His Leu Gly Gly Gly Cys Asn Phe Pro His His Cys Arg
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Val Leu Arg Asn Arg Leu Gln Pro Cys His Arg Ser Ser Gln Leu His
65                70                75                80
Gln Ala Phe Gly Arg Ala Val Ile Arg Leu Pro Ala Lys Ala Gln Ala
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<210> 2285

<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
			35				40					45			
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
	50					55					60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65					70					75				80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
			85						90				95		
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
			100					105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
			115				120					125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
			130			135					140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170					175		
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
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Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

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Ser Ala Ser Val Pro Arg	Ala Gly Val Ser Thr	Gly Ala Leu Gly Ala
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Ala Ala Ala Val Ala Ala	Ala Thr Ala Arg Arg	Leu His Gln Arg Ser
225	230	235
Val Ser Lys Glu Lys Trp	Val Glu Thr Leu Val	Val Ala Asp Ala Lys
245	250	255
Met Val Glu Tyr His Gly	Gln Pro Gln Val Glu	Ser Tyr Val Leu Thr
260	265	270
Ile Met Asn Met Val Ala	Gly Leu Phe His Asp	Pro Ser Ile Gly Asn
275	280	285
Pro Ile His Ile Thr Ile	Val Arg Leu Val Leu	Leu Glu Asp Glu Glu
290	295	300
Glu Asp Leu Lys Ile Thr	His His Ala Asp Asn	Thr Leu Lys Ser Phe
305	310	315
Cys Lys Trp Gln Lys Ser	Ile Asn Met Lys Gly	Asp Ala His Pro Leu
325	330	335
His His Asp Thr Ala Ile	Leu Leu Thr Arg Lys	Asp Leu Cys Ala Ala
340	345	350
Met Asn Arg Pro Cys Glu	Thr Leu Gly Leu Ser	His Val Ala Gly Met
355	360	365
Cys Gln Pro His Arg Ser	Cys Ser Ile Asn Glu	Asp Thr Gly Leu Pro
370	375	380
Leu Ala Phe Thr Val Ala	His Glu Leu Gly His	Ser Phe Gly Ile Gln
385	390	395
His Asp Gly Ser Gly Asn	Asp Cys Glu Pro Val	Gly Lys Arg Pro Phe
405	410	415
Ile Met Ser Pro Gln Leu	Leu Tyr Asp Ala Ala	Pro Leu Thr Trp Ser
420	425	430
Arg Cys Ser Arg Gln Tyr	Ile Thr Arg Phe Leu	Asp Arg Gly Trp Gly
435	440	445
Leu Cys Leu Asp Asp Pro	Pro Ala Lys Asp Ile	Ile Asp Phe Pro Ser
450	455	460
Val Pro Pro Gly Val Leu	Tyr Asp Val Ser His	Gln Cys Arg Leu Gln
465	470	475
Tyr Gly Ala Tyr Ser Ala	Phe Cys Glu Asp Met	Asp Asn Val Cys His
485	490	495
Thr Leu Trp Cys Ser Val	Gly Thr Thr Cys His	Ser Lys Leu Asp Ala
500	505	510
Ala Val Asp Gly Thr Arg	Cys Gly Glu Asn Lys	Trp Cys Leu Ser Gly
515	520	525
Glu Cys Val Pro Val Gly	Phe Arg Pro Glu Ala	Val Asp Gly Gly Trp
530	535	540
Ser Gly Trp Ser Ala Trp	Ser Ile Cys Ser Arg	Ser Cys Gly Met Gly
545	550	555
Val Gln Ser Ala Glu Arg	Gln Cys Thr Gln Pro	Thr Pro Lys Tyr Lys
565	570	575
Gly Arg Tyr Cys Val Gly	Glu Arg Lys Arg Phe	Arg Leu Cys Asn Leu
580	585	590
Gln Ala Cys Pro Ala Gly	Arg Pro Ser Phe Arg	His Val Gln Cys Ser
595	600	605
His Phe Asp Ala Met Leu	Tyr Lys Gly Gln Leu	His Thr Trp Val Pro
610	615	620
Val Val Asn Asp Val Asn	Pro Cys Glu Leu His	Cys Arg Pro Ala Asn

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Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro																			
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Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys																			
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Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp																			
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Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser																			
	690													695			700		
Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly																			
705	710													715			720		
Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu																			
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Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe																			
	740													745			750		
Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala																			
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Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr																			
	770													775			780		
Ser Pro Gly Pro Thr Lys Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser																			
785	790													795			800		
Arg Gly Pro Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr																			
	805													810			815		
Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr																			
	820													825			830		
Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val																			
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Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly																			
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Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu																			
865	870													875			880		
Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser																			
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Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly																			
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His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp																			
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Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val																			
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Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp																			
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Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser																			
	995													1000			1005		
Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His																			
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Gly Glu Gly Thr Gln Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly																			

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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
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Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
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Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
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Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
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Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
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Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
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Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
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Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
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Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
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Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
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Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
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Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
1445	1450	1455
Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
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Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
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Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

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<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

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Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
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Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
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Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85					90						95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
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Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
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<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1			5					10					15		
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35				40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50					55				60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70				75					80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcatgtctcta ccgcaaagtc ggggtcccccac cgattaaaaa tgcccgggtc gaggacagcc
 60
 ttcggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtggctga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgtctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca
 300
 tcggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa
 360
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg
 420
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggatttcc
 480
 tcctgccagt cccgcgctgc ccgaggcaag ctcatcccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292
<211> 140
<212> PRT
<213> Homo sapiens

<400> 2292
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
1 5 10 15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
20 25 30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
100 105 110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
115 120 125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
130 135 140

<210> 2293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2293
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
60
gtgaacactg tcgctaagaa ctggttgaac cggtcaaca cgccggatat gaaaccact
120
gaggagatca agcggcagtt ccaaggctctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc
240
gaggcgaatc cgcgattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgaggtg ctccggatgc atgccttc
358

<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2294
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100           105           110
Ala Cys Leu
      115

```

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

```

ggcaccgatac cgagtggtagg tgccgggatt aggnccgatac tanaaacatt ctccgccctt
60
ggggcgtagtg gctgctcggg cattaccgca ctggtagcgc aaaatacgcg cggcgtagcag
120
tcgggtgatac gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

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<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

```

Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
      1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```



```

      35      40      45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50      55      60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
      65      70      75      80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85      90      95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100      105      110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115      120      125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130      135      140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
      145      150      155      160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165      170      175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297
 <211> 414
 <212> DNA
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
120
caccctccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggttct ctggttaata
240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
360
gatctgacct acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
414

```

<210> 2298
 <211> 67
 <212> PRT
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1      5      10      15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
20      25      30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
35      40      45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttatttt ttttttcccg gaaggcaa at ggctggcgtg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcca ctctgacca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggcgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg
300
cgcaagtctt ctcatatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaat tatatttcct gttcctagtt gtctgaact gggtagcctt ggtagaagcc
540
ttccaaaagg aaatcacat gttgcctctg gtgggtgtcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttataact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt
780
tccactgata cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

20 25 30
 Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
 35 40 45
 Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
 50 55 60
 Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
 65 70 75 80
 Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
 85 90 95
 Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
 100 105 110
 Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
 115 120 125
 Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
 130 135 140
 Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
 145 150 155 160
 Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
 165 170 175
 Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
 180 185 190
 Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
 195 200 205
 Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
 210 215 220
 Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
 225 230 235 240
 Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
 245 250 255
 Gly Phe Leu Glu His Ser Asn Lys Glu Arg
 260 265

<210> 2301

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg
 60
 nncgccacct cttccgcgna tttccctgaa gcttgcgata acactatgga aatcgctgag
 120
 nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgatatt cccacccccg
 180
 gagggggaga atgaggaatc ctgggttcgtc aaagaagttg aacgcggttt gcactaccga
 240
 ttccccgagg gcattccccga tgacgtacgc aagcaggcag attatgaagt agggattatt
 300
 acccagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
 360
 aataacggaa ttcgagtggg ccccgggcgt
 390

<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1 5 10 15
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20 25 30
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35 40 45
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50 55 60
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65 70 75 80
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85 90 95
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
 100 105 110
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
 115 120 125
 Gly Arg
 130

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303
 nnggatccag gctgccccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
 60
 gcacctgtgt ttggctacct gggcgaccga catagccgca aggtaccat gagcttcggt
 120
 atcttgcgtg ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
 180
 ctcttcttcc tgtcccgagg catcgaggc actggctcgg ccagctactc caccatcgcg
 240
 cccaccgtcc tgggagacct cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc
 300
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg
 360
 ctgactggga actggcgctg ggcctccga gtcatgcct gcctggagge cgtggccttg
 420
 atcctgctta tctgctggt tccagacca ccccgaggag ctgccgagac acagggggag
 480
 gggggcgtgg gaggttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
 540
 tggagttttg tgtggtcgac cctcgagtg accgccatgg cctttgtgac tggagccctg
 600
 gggttctggg cccccaagtt tctgctcgag gcacgcgt
 638

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
 gccccgcct ctatcttccg gcacgtcac agtcgcatcg tgacgggtact ggctggagtc
 60
 tcggaccagc acactttgac cgtcgtgggc gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
 cggcgtcggg gcgcgacgag ggcgatgagt tggcgtcgt tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
 ngctttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
 gccaaaggcac tgggtggggc tggcagtggg agcaagggtc cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccc
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

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<210> 2311
<211> 378
<212> DNA
<213> Homo sapiens
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<400> 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
 60
 ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgtctt cgccgcggcg
 120
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
 180
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
 240
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg
 300
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
 360
 cttgtgacca tgaacgcg
 378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35					40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50					55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70				75					80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
			85					90						95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
		100						105					110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggg gactcaaacg
 60
 atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcgc
 120
 ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcgggtac gacagcgggg
 180
 ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20						25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50				55					60					
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65				70					75					80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85					90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
		100					105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150					155					160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170						175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200					205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
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 120
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 180
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 300
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 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ctttccgcaa
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 accggt
 546

<210> 2316
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 2316
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
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 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
 20 25 30
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
 35 40 45
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
 50 55 60
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
 65 70 75 80
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
 85 90 95
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
 100 105 110
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
 115 120 125
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
 130 135 140
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
 145 150 155 160
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
 165 170 175
 Trp Arg Thr Ile Thr Gly
 180

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
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 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
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 gacgtcggct gaggggcct ggtgtgagat gcaaccccg attcctgcca ggaaagagcc
 300
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct
 360
 cgggcagttc gattggctcg gtcctgatgg tgagcttccc cggctgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgagag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
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 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
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gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt
180
gacaaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
aaaatatttc tctaccatga tgggcttctg cgaatgggta cagagaagta cattccacct
360
aatgagtcca atttgaccca gttatacatg catctgacaa actactccgt gaacaagcat
420
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacttc catcaaatgg
480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattggtgg taaagaccct gattgtagca gaacctcatg tcctgcatgc ctatcgaatg
600
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat
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atthttgttg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt
720
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780
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900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtctca
960
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1020
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1140
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1320
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1380
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1440
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1500
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1620
atgcctgctc taccaactct caagtgagt agtctttgcg gcaactgaaa acaaaagaac
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccggtttc

1740

caggaaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90						95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115					120						125		
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130					135					140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195						200					205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225					230						235			240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245						250					255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275						280						285		
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310						315			320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325						330					335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

340 345 350
 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
 355 360 365
 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
 370 375 380
 Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
 385 390 395 400
 Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
 405 410 415
 Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
 420 425 430
 Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
 435 440 445
 Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
 450 455 460
 Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
 465 470 475 480
 Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
 485 490 495
 Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
 500 505 510
 Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
 515 520 525
 Leu Pro Pro Thr
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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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 cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
 120
 acagggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
 180
 agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
 240
 attgagtgtg acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
 300
 cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
 360
 gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
 420
 cagaggtgga gtg
 433

<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
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Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
      20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100          105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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acgcgtcaaa actggcaaaag ctggcgggctt aggggggaggg gcaagtggac ttggaggccc
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tcctccactg tgcaccccct tggaaaaaaa gcgagggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggtagcttct
180
ctgccgggca cagcgnctct caggagccag ccgggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctcccgc ccgttggccc cagagcggac gctgggacgc
300
ccgggggtctg gcagctctgc gcccggttag gagcggggcg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcgggga
480
gctcgggtga cttggccatc cccatccccg gccacggccc ggaggggcggc cg
532

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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35           40           45
Pro Arg Thr

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50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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 120
 ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtgtg ggaccagaa
 180
 gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
 240
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcggt cgtgtatgag
 300
 aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca
 360
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<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

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Gly	Gly	Lys	Met	Asp	Glu	Asn	Arg	Phe	Val	Ala	Val	Thr	Ser	Ser	Asn
		20						25					30		
Ala	Ala	Lys	Leu	Leu	Asn	Leu	Tyr	Pro	Arg	Lys	Gly	Arg	Ile	Ile	Pro
		35					40					45			
Gly	Ala	Asp	Ala	Asp	Val	Val	Val	Trp	Asp	Pro	Glu	Ala	Thr	Lys	Thr
	50					55				60					
Ile	Ser	Ala	Ser	Thr	Gln	Val	Gln	Gly	Gly	Asp	Phe	Asn	Leu	Tyr	Glu
65					70					75				80	
Asn	Met	Arg	Cys	His	Gly	Val	Pro	Leu	Val	Thr	Ile	Ser	Arg	Gly	Arg
			85						90				95		
Val	Val	Tyr	Glu	Asn	Gly	Val	Phe	Met	Cys	Ala	Glu	Gly	Thr	Gly	Lys
		100					105						110		
Phe	Cys	Pro	Leu	Arg	Ser	Phe	Pro	Asp	Thr	Val	Tyr	Lys	Lys	Leu	Val
	115						120					125			
Gln	Arg	Glu	Lys	Thr	Leu	Lys	Val	Arg	Gly	Val	Ala	Arg	Thr	Pro	Tyr
	130					135					140				
Leu	Gly	Asp	Val	Ala	Val	Val	Val	His							
145					150										

<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

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 180
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 300
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 360
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 420
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 599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu Phe Gln Lys Ile Lys Tyr Ser Tyr Asp Ala Leu Glu Lys Lys Gln
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 Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln
 20 25 30
 Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
 35 40 45
 Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
 50 55 60
 Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
 65 70 75 80
 Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
 85 90 95
 Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln
 100 105 110
 Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
 115 120 125
 Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
 130 135 140
 Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
 145 150 155 160
 Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
 165 170 175
 Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2329
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180
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240
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300
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392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
1 5 10 15
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
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gatttaaggt gcccagatcc acgctgatgg actgccgtag acaactgaaa gacagtaagc
120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg
180
tttcgtctct gaaaattaat ggggtataact gccaaaggta tggattcgag gtgctggatt
240
gggattcagt ttccccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
300
gactttacct cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa
360
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420
gttccaggac ccagctggga ggagtcattt tggaggctca cggctcttctt tgtcagtttg
480
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540
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600
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc
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720
cagaatgctg caaagaggag cccagccacc tatggctatt ctcagaagaa gcacaaatgc
780
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840
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900
tgcactgatg ccatgcgtga gaactggatc agcctcagat atgcaagtgg cataaatgtc
960
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1020
aaaaacacaa ttgttttcag taatccttct tcagaatgta gtatgaagga ggaatacag
1080
acatgtatgt ttcctaagga aactgacatt aaaacttcag agaacacagc tgagttcaag
1140
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga
1200
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat
1260
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaagggtggc
1320
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag
1380
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag
1440
aaaagagaag gaaatttaca aaatttaaag tggagtaaaa gtcgaacatg tagaaagaac
1500
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttggtg
1560
tgcagtgact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctggtgtata
1620
caggaaagca ctaggagggt ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct
1680
gccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc
 1800
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc
 1860
 cagcacttcc tgccggcccg agacagtgtt tcacaaaatg attttccttc tgaagctccc
 1920
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa
 1980
 tacgcagagc ctctctgtcc cagccttcct gccggggcca caggtgttga agaagataaa
 2040
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta
 2100
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc gggtcataat
 2160
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg
 2220
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgcaa tggcttcccc
 2280
 tgtcttcgag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc
 2340
 ccaccaaca tgctgtgtgc ctggggacat gccagtttca tcagctctcc gccctacctc
 2400
 acaagcacc gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa
 2460
 agcgatgtgt atgaaaattg ctgccccatc aacccaccca cggaacattc gaccacatg
 2520
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcctat
 2580
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga
 2640
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag
 2700
 aggtctgtgt tttgattact agtgtaaact gggtattgag atagattatg acattggtgg
 2760
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa
 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro Asp Phe Thr Ser Ser Trp Val Ile Arg Asp Leu Ser Leu Val Thr
 1 5 10 15
 Ala Ala Asp Leu Glu Phe Arg Phe Thr Leu Asn Val Thr Leu Pro His
 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

1705

515	520	525
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu		
530	535	540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro		
545	550	555
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly		
565	570	575
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr		
580	585	590
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly		
595	600	605
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile		
610	615	620
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro		
625	630	635
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr		
645	650	655
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp		
660	665	670
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala		
675	680	685
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr		
690	695	700
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro		
705	710	715
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu		
725	730	735
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr		
740	745	750
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr		
755	760	765
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser		
770	775	780
Tyr Cys Gly Asn Val		
785		

<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc
 60
 gaagtaataa atatgaatgg ggtgtatcat ataatagaaca acgaatatcc atatagtgc
 120
 gacgaagttc ttcacaaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
 180
 aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
 240
 tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
 300
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
 360

gtaaaagaaa tggtcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcaactgta cctctacttt
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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatggggc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 accgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag
 240
 ggcagccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcatttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
 ngagaagagg aggagtcac ggcaggggcc ggcattctcca ggcctcgcca agccgctggg
 60
 accatgtgca gctcaagaat ggcctccggc ccatcggcct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 gggatcaatgc caggcacctt gctattgagg aacctatcca ggaggaagga ctcgggcaga
 240
 cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctggggcc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

<400> 2341

gccaaacctc cctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
 60
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag
 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala Ser Leu Ala Tyr Ala Ser Ala Gly Gly Ala Arg Gly Gly His Gly
 1 5 10 15
 Gly Gly Gly Gly Lys Gly Arg Arg Gly Glu Gly Glu Gly Ser Arg Gly
 20 25 30
 Gly Gly Gly Arg Gly Arg Ala Ala Pro Val Ser Gly Ser Pro Gly Ala
 35 40 45
 Thr Ala Gln Ala His Ala Pro Ser Pro Ser Thr Ser Ser Thr Ser
 50 55 60
 Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp
 65 70 75 80
 Gln Ala Thr Ser Gly Xaa Gly Ser Gly Glu Gln Cys Glu Thr His Leu
 85 90 95
 Val Ser Ala Leu Ser His Pro Lys Tyr Ser Gly Pro Gly Gly Ser Glu
 100 105 110
 Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggccccgaga agatgctgat gccttcacag ttccccaacc agggccagca gggattctct
 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctctggg accgtgcatt cagccccaaa ccgggggcta
 240
 ggagggcggc cttcggaact caccatcagt attaatacaga tgggctcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccagggt cactcaccctc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgcctt tgccttctgc caaccgcca
 420
 ggacctctca agtcgcccc ggtcctcggc tcttccctca gtgtccgttc acccactggc
 480
 tcgcccagca ggctcaagtc tcttccatg gcggtgcctt ct
 522

<210> 2344
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 2344
 Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln
 1 5 10 15
 Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp
 20 25 30
 Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro
 35 40 45
 Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro
 50 55 60
 Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu
 65 70 75 80
 Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser
 85 90 95
 Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser
 100 105 110
 Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro
 115 120 125
 Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys
 130 135 140
 Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly
 145 150 155 160
 Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser
 165 170

<210> 2345
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 2345
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 60
 ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgcccggcg
 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgtgtcc gagtccttgg cgctgtcgga cgtgagtga
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc
 540
 ggaagaagtc gggcaacgcg t
 561

<210> 2346
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2346
 Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp
 1 5 10 15
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu
 20 25 30
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg
 35 40 45
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
 50 55 60
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
 65 70 75 80
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
 85 90 95
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
 100 105 110
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
 115 120 125
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
 130 135 140
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
 145 150 155 160
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
 165 170 175
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg
 180 185

<210> 2347
 <211> 375
 <212> DNA
 <213> Homo sapiens

<400> 2347
 atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcgtggtatc
 60
 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggt ggcggggatc
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg ttgccccaaa ggtgtgctga acgtggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 2348
 Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu
 1 5 10 15
 Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val
 20 25 30
 Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp
 35 40 45
 Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn
 50 55 60
 Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys
 65 70 75 80
 Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr
 85 90 95
 Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val
 100 105 110
 Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala
 115 120 125

<210> 2349
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 2349
 nnnaaaaaaaa aaaaaaaaaa aaaaacacaa tatttaatgg acgcggttta ttcagcaggt
 60
 gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt
 120
 gcacataatc atattaaatg gatttgtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtctg tcaacggaat cgctggatct tatgtgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaa acgttcacca ttcccttggc
 360
 gaaggaaactt ttgatgatta tagaaaaatg tttaggccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1 5 10 15
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
 20 25 30
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
 35 40 45
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
 50 55 60
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
 65 70 75 80
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
 85 90 95
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
 100 105 110
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
 115 120 125
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
 130 135

<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351
 nacgcgttgc cgcgcgataa ctctgggtgag ggtcttgctg gggccctgct ggcccttggt
 60
 ggctccgccc agctgtgcga ccgttcctgg atcaccgacc agtatgaccg gttcgtgcgt
 120
 ggcaatactg tgctcgctca gccgaatgat gccggcatga ttctgtattga cgacaacctc
 180
 ggcacgcgc tgctccttga cgctaacgga cgccagacca cccttaacct gtatcttggc
 240
 gccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
 300
 gctgtcactg attgcctcaa ttatggctcc ccgtacgac ccgatgtcat gtggcaattc
 360
 gacgagacca tccttggctt ggttgacggc tgccgcgagc ttggcgtgcc gggtacgggc
 420
 ggtaacgttt ccctgcacaa ccgcactgga gatgagtcga ttccggcctac tccgctcgtt
 480
 ggtgtgctcg gcgttattga tgacgtgcat cgtcgcaccc cgtcggcctt cgcacacgac
 540
 ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
 600
 gacgtcatcc acgctggcca cctaggcggt atgccccga tgcccacact gaatgccgag
 660
 aaggccctgg ccgcggtgat ggtggaagcg tcgaag
 696

<210> 2352
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 2352
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1 5 10 15
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
 20 25 30
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
 195 200 205
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
 210 215 220
 Ala Val Met Val Glu Ala Ser Lys
 225 230

<210> 2353
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 2353
 nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg
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 atttcagggtg atgtttcaga ctttgcagat gccaaagcgta tggtagatca agcgattaca
 120
 gaactcgggtt ctgttgatgt cttgggtcaac aatgctggga tcaactcaaga tacgcttatg
 180
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
 240
 aacatgacgc aagcagtctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
 300

atgtctagtg tggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa
 360
 gcaggttga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc
 420
 gt
 422

<210> 2354
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2354
 Xaa Ala Ile Ser Glu Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val
 1 5 10 15
 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys
 20 25 30
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu
 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
 100 105 110
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
 115 120 125
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg
 130 135 140

<210> 2355
 <211> 5191
 <212> DNA
 <213> Homo sapiens

<400> 2355
 cttgccaagt ttgacggtga agtgatctgt gaacctcca acaacaaact ggacaaattc
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 agcggaaccc tctactggaa ggaaaataag ttccctctga gcaaccagaa catgctgctg
 120
 cggggctgtg tgctgcgaaa caccgagtgg tgcttcgggc tggatcatctt tgcaggctct
 180
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc
 240
 ctaatgaata ccctgggtgt ctggattttt ggattcctgg tttgcatggg ggtgatcctg
 300
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttccaggt ctacctgccg
 360
 tgggatgagg cagtggacag tgccttcttc tctggcttcc tctccttctg gtectacatc
 420
 atcatcctca acaccgttgt gccatttca ctctatgtca gtgtggaggt catccgtctg
 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggacgcct
540
gcagaagccc gcaccaccac cctaaacgag gagctgggccc aggtggagta catcttctcc
600
gacaagacgg gcaccctcac ccagaacatc atggttttca acaagtgtc catcaatggc
660
cacagctatg gtgatgtgtt tgacgtcctg ggacacaaag ctgaattggg agagaggcct
720
gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc
780 aggtgtcaa gatcggggac cccacacgc atgagttctt ccgcctcctt 840
tcctgtgtc atactgtcat gtcagaagaa aagaacgaag gagagctgta ctacaaagct
900
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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 Leu Asp Lys Phe Ser Gly Thr Leu Tyr Trp Lys Glu Asn Lys Phe Pro
 20 25 30
 Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
 35 40 45
 Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
 50 55 60
 Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
 65 70 75 80
 Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
 85 90 95
 Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
 100 105 110
 Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
 115 120 125
 Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
 130 135 140
 Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
 145 150 155 160
 Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
 165 170 175
 Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
 180 185 190
 Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
 195 200 205
 Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
 210 215 220
 Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
 225 230 235 240
 Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
 245 250 255
 Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
 260 265 270
 Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
 275 280 285
 Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
 290 295 300
 Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
 305 310 315 320
 Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
 325 330 335
 Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
 340 345 350
 Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
 355 360 365
 Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
 370 375 380
 Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
 385 390 395 400
 Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
 405 410 415
 Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

1721

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Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
865              870              875              880
Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
945              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Trp Ile
      965              970              975
Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
      980              985              990
Gly Ala Asp Lys Pro Leu Lys Gly
      995              1000

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<210> 2357

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

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120
ggtgcgccaa acggtgaaga cgagggttcc cgcaagctca tcaccgtgtg ggggtctgag
180
ccacaaaacc cactcctgcc agccgacacc aatgaaaccg gcggcacgaa agtcatcacc
240
gccttggttcg ccggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
300
aaatccattg acttcgatgg cgaccgcacc tacacgggtga cgctgcggaa aaccagattc
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408

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<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2358

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Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
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Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
20        25        30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
35        40        45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
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120
accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
attgtgatca atccaggagc atggacccat acatcggcag ccatccacga tgcgttgatt
240
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300
aggcattttt cctacgtgtc acgc
324

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<210> 2360
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
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Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
      20              25              30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35              40              45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50              55              60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65              70              75              80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
      85              90              95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
      100              105

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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgccctgtcc tcacggagct
 180
 gtagggagag tcccaaaggc aggtgggtggg gctggggcct ccaacagctg ggtcctctca
 240
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc
 300
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 360
 tgcagctcca caccgggaa acaccacatg ctcgcttt
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

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Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
		20					25						30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
	35					40						45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55				60					
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70					75				80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
				85					90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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 360

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 660
 cttccaccac ctgctcccc aggggctccg cctcgtgact cacgctcagg caagtctccg
 720
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 833

<210> 2364
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2364
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 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr
 20 25 30
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu
 35 40 45
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val
 50 55 60
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
 65 70 75 80
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
 85 90 95
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
 100 105 110
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser
 115 120 125
 Pro Asp Glu Arg Ser Arg Ser
 130 135

<210> 2365
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2365
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 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa
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<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met Ala Arg Cys Gly Leu Asn His Leu Glu Leu Tyr Gly Glu Ala Gly
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 Phe Ala Tyr Arg Gly Glu Glu Glu Val Trp Ala Asp Arg Ser Pro Val
 20 25 30
 Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly
 35 40 45
 Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp
 50 55 60
 Leu Glu Thr Glu Ser His His Arg Cys Glu Asn Pro Asp Gly Val
 65 70 75 80
 Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
 85 90 95
 Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu
 100 105 110
 Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu
 115 120 125
 Leu Gly Thr Gly
 130

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

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 180
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 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
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 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
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 120
 gtgcctcccc caacccagct caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
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 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
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 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
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 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
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 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
 120
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccc gggcactcct caggaccggg cctcagggga cagcaaacaa
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcggggcc aaggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

<210> 2373
 <211> 591
 <212> DNA
 <213> Homo sapiens

```

<400> 2373
gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcacc
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

<210> 2374
 <211> 167
 <212> PRT
 <213> Homo sapiens

```

<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```

<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
 1             5             10             15
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
      20             25             30
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
      35             40             45
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
      50             55             60
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
65             70             75             80
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg

```

```

<400> 2378
Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
 1             5             10             15
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
 20             25             30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

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tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
1      5      10      15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20      25      30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35      40      45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50      55      60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65      70      75      80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85      90      95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100      105      110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctt tgcgtgacgt ggaaccgatc
60
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
120
ccgtcctctt tgacatggac ggaaccctgc tcaacacctt gccggcctgg tgcgtggcat
180
ctgagcatct gtggggcact tctctggctg acgtgacag cgccaagggt gacgggggca
240
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca
300
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
360
ccggagctga ccgcctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35					40					45			
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50					55					60				
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65					70				75					80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85						90					95	
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
		100						105						110	
Ser	Pro	Thr	Arg												
			115												

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt
60
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
120

cagaaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatggggt cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt
 300
 ctttcttgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt
 360
 ggcggagtgc aacatgggtat gtgtatgccca ctg
 393

<210> 2384
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 2384
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr
 1 5 10 15
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp
 20 25 30
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala
 35 40 45
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val
 50 55 60
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu
 65 70 75 80
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg
 85 90 95
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg
 100 105 110
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg
 115 120 125

<210> 2385
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2385
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tggggttcac
 120
 cccgtgaccc tctacggggt tccatgcccc cagcaccacg tccatcatca tttctggggt
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc
 300
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccggggcgcg ccccgggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgct ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agttacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgttta caggaatgtg ggtggtagt acccgatatg
 540
 ggggtcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttagggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
          20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
          35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
          50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatcaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgcgcg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgac acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
          20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
          35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
          50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
          65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
          85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
          100          105          110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcggtccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccaccatc gatcccgcaa
120
aagaccgctg cgctttcaac cgcgccatcg accattacct gcctaccag ggcttcact
180
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgctg gattgcgggtg agctgctgca aagccctgaa cgggcgaaga
300
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
360
agtgcctgac cgcaccaaag ccctgcct
388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
1 5 10 15
Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
20 25 30
His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
35 40 45
Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
50 55 60
Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
65 70 75 80
Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
85 90 95
Thr Ala Pro Lys Pro Cys
100

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
60
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
120
tgcgcccgt tccgatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240

atgacggcta tgccgcttgt tgttgcgcg gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc
 360
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10					15		
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
		50				55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90					95		
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115					120					125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
		130					135								

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttagtcata
 60
 tctaagtgcc ccaataaaac agcgcgggcg attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<400> 2398
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
1 5 10 15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

          20          25          30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
          35          40          45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
          50          55          60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
          65          70          75

```

<210> 2399
 <211> 344
 <212> DNA
 <213> Homo sapiens

```

<400> 2399
acgcgtcatg cttcacgaaa cgggtcacgc gtttcattac caagcagctg gcaaacacaa
60
cttgatatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgct aggggaactt tcgggtaaag aacaggaact
180
agtcaaacc tttgctggct cgccaggct tggaggggtt cgaaaaccta caacgccaca
240
aaacgggttc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgatggc ttgagatgcg acacacgctc ggggtggatt ggctc
344

```

<210> 2400
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 2400
Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1          5          10          15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20          25          30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35          40          45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50          55          60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65          70          75          80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85          90          95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100          105          110

```

<210> 2401
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctgcag taactcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggctggg gggtcattttt caccaacctc
 300
 gtggacaagt acggcgagct cccggccgag gtcattgctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgca tategccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50					55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70				75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90					95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115					120				125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150					155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaccc gctggactcg tctgcgggttc acccggaagc ctacccgctg
 60
 gtgcagcgta ttgccgcga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgccccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggcggtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttgggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10						15	
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35				40						45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50					55					60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70					75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
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 120
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ctttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggctcacca ccaccacccc caatgcccag accgcagacc
 300
 tgcattcctc ccattctaca gccccaaatc caaaccgcta ttcattctac ctcccatcct
 360

actcctcagc aatttcttcc accgtagact ctgggtaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac ctcctcctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
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 840
 gagaagggga agaacgcgt
 859

<210> 2406
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 2406
 Met Asp Arg His Leu Val Ser Leu His Leu Ser Pro Gly Asn Ala Trp
 1 5 10 15
 Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln
 20 25 30
 Arg Met Ala His His His Pro Pro Gln Cys Pro Asp Arg Arg Pro Ala
 35 40 45
 Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro
 50 55 60
 Pro Ile Leu Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile
 65 70 75 80
 Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln
 85 90 95
 Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala
 100 105 110
 Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly
 115 120 125
 His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser
 130 135 140
 Arg Leu Trp Val Arg
 145

<210> 2407
 <211> 303
 <212> DNA
 <213> Homo sapiens

<400> 2407
 nacgcgtggg ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc
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gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atccccgtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccatccggtg
 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
 ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
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 cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggccccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
          35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
          50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
          65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
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gggtctgcgg cagacagggg gacagagggg gctgtgagag ccctgaggct gaggggcttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtgg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgccctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
          35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
          50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

<400> 2414
Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
 1          5          10          15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
      20          25          30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```

35 40 45
 His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
 50 55 60
 Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
 65 70 75 80
 Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
 85 90 95
 Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
 100 105 110
 Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
 115 120 125
 Gly Lys Ser Ser Pro Gln Pro Pro Val
 130 135

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

ctctgtgccag cgtcctcgcg ggtctgaatg gaagggtcga ggtcgtcgtc ggccggcgagc
 60
 agatcctgaa gccagaactc caccctcgcg cccgcgccat gcggcgggag aggtgcggcg
 120
 cccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcgttctt cgctgcggag
 180
 atcatggacg cctttgatcg ctggcccaca gacaaggagc tgggtggcca ggctaaagca
 240
 ctaggccggg agtacgtgca cgcgcggctt ttgcgcgcgc gcctctcctg gacgcgtcca
 300
 gacgctgcct cgctgcctcc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
 360
 ctgggcgatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
 420
 cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
 480
 atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
 540
 ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgccct cgtggactgc
 600
 ctgggggagt tcgtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
 660
 gatgtctca agtgtgtggt cagcacagac cctggcctcc gctccactg gctggtggct
 720
 gcactctgca gcttcggccg ctctctgaag gctgccttct tcgtgctgct gccagagaga
 780
 tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
 840
 cagcaccga acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
 900
 cccctaagc cccgttcctc cgcagaccca ggccctccgg aagggtgagt ggggaggggc
 960
 ttctctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
 1020

ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tgggaaggg gcccgggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccgggaaca cctgctctca cctgagcccc aggtgaaggg gcccgggaaca cttgctctca
 1320
 cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaacccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgacctggt cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggt
 1560
 atggggctcct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtgagggg tgagggtgac cccatctgct atttttgtgc tcctcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatatgcc tgggaagccc agcccctcag
 1800
 gtgccccac acacagcctt ccttgacgc ctacatttct aggcacatgt gaggcattct
 1860
 tctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagatata
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc acctgagccc
 1980
 tcccggccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggt cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtataaaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu


```

      50              55              60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met
65              70              75              80
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser
      85              90              95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly
      100              105              110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
      115              120              125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
      130              135              140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
145              150              155              160
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu
      165              170              175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
      180              185              190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val
      195              200              205
Leu Leu Pro Glu Arg
      210

```

<210> 2417
 <211> 615
 <212> DNA
 <213> Homo sapiens

```

<400> 2417
nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
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aagctgattt gattttcata ttgatacctc aatagttaag tgaaggacta gttattgctc
120
cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggggagaa
360
aaatccacaa atccttttgc tttcaaactat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacggtg tggtattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt
540
gctggcgag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcatt
615

```

<210> 2418
 <211> 101
 <212> PRT

<213> Homo sapiens

<400> 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaatttttcag aagtcctggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgcgcttcc
120
gtccttctct cagtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

```

<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

1751

gaatgcgag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatata taaggtaa
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag gggtggaata
 360
 gagaatttga t
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1			5					10					15		
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20					25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35				40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55				60						
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70				75				80			
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90				95			
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 cccgtcctga acggctacga gatgacccgc cgcctgcgcg aacatgaagc cnncgccatg
 120
 acctcccggc ctgcacgggg gttcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt caccgcccgc ccgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggagag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctc gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val
 1 5 10 15
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
 cataacaaag gcttagggat tttggtgcc tgtgcaattn tggcagcttt tctgttgatt
 60
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccctgctgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatacctt aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60
 Asn Val Pro Leu Ser Gly Lys Val
 65 70

<210> 2429
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 2429
 tcgcgtcggg tcggcgagggt tgacgctggt gatacctaagc cccatgagga cgacgacctc
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 atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct
 120
 gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg
 180
 ctggaacagg ccgtacatga gctggatggc actggggatg ctgatcctcg cgccgctgag
 240
 ttggctgagc gcgcccgcc gatgtcgtat gacctcactg acctcgctgc ttcggctcgt
 300
 ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggctgcttg
 360
 gcggctattc agcggctggt gagggcgcg accaccaccc tcgacgatct cctcgactcc
 420
 actgcggc
 428

<210> 2430
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2430
 Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
 1 5 10 15
 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20 25 30
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431
 <211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

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aatggcgagg taacaatttc tggggcaaaa atgcccgcac taccaatcct atttgctact
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgctgcat
300
attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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      20             25             30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
      35             40             45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
      50             55             60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
      65             70             75             80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
      85             90             95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta ccctgaagt tcaagtgcaa
240

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tgccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
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 360
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 420
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<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
1				5					10					15	
Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
	35						40					45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50				55						60				
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65					70				75					80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90					95		
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100				105					110				
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
	115					120					125				
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 120
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aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggg ggacgatgct
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<210> 2436
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2436
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 20 25 30
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 35 40 45
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala
 50 55 60
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu
 65 70 75 80
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp
 85 90 95
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser
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 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser
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 Thr Gly Gly Lys Arg
 130

<210> 2437
 <211> 449
 <212> DNA
 <213> Homo sapiens

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 120
 atgggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc
 180
 tcttaaatcc caccatttac tgtgacacag tgaccgggtc ctgcagcgga ctggatagtt
 240
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 300
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 449

<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
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 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
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<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 atgtatctgt cttccacgga gccgccagcc gctgctgaat gggcatgtct gctgcgccct
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 420
 atgtgtgacg agatgggtcac actgtggagg ctggccgtgc tggaccctgc actcagcccc
 480
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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
		20					25					30			
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35				40					45				
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55				60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Glu	Ile	Leu	Thr	Asp	
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
		100					105						110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135					140				
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150					155				160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
			165					170						175	
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
		180						185					190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
		195					200					205			
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215					220				
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225					230					235				240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250					255		
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

	260		265		270
Gly Leu Gly	Glu Gly Val Pro Ser Ser Gln Arg Gly	Pro Arg Arg Leu			
275		280		285	
Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro Gly Gly					
290		295		300	
Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys Gly Ser					
305		310		315	320
Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser Ser Leu					
	325		330		335
Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu Ala Leu					
	340		345		350
Gly Ala Glu Ala Ser Thr Phe Gly Gly Phe Pro Glu Ser Pro Pro Pro					
	355		360		365
Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu Pro Glu					
	370		375		380
Pro Pro Asp Thr Tyr Glu Glu Asp Gly Gly Val Tyr Phe Ser Glu Gly					
385		390		395	400
Pro Glu Pro Pro Thr Ala Ser Val Gly Pro Pro Gly Leu Leu Pro Gly					
	405		410		415
Asp Val Cys Thr Gln Asp Asp Leu Pro Ser Thr Asp Glu Ser Gly Asn					
	420		425		430
Gly Leu Pro Lys Thr Lys Glu Ala Ala Pro Ala Val Gly Glu Glu Asp					
	435		440		445
Asp Asp Tyr Gln Ala Tyr Tyr Leu Asn Ala Gln Asp Gly Ala Gly Gly					
	450		455		460
Glu Glu Glu Lys Ala Glu Gly Gly Ala Gly Glu Glu His Asp Leu Phe					
465		470		475	480
Ala Gly Leu Lys Pro Leu Glu Gln Glu Ser Arg Met Glu Val Leu Phe					
	485		490		495
Ala Cys Ala Glu Ala Leu His Ala His Gly Tyr Ser Ser Glu Ala Ser					
	500		505		510
Arg Leu Thr Val Glu Leu Ala Gln Asp Leu Leu Ala Asn Pro Pro Asp					
	515		520		525
Leu Lys Gly Lys Lys Asn Lys Val Ser Thr Ser Arg Gln Thr Trp Val					
	530		535		540
Ala Thr Asn Thr Leu Ser Lys Ala Ala Phe Leu Leu Thr Val Leu Ser					
545		550		555	560
Glu Arg Pro Glu Arg His Asn Leu Ala Phe Arg Val Gly Met Phe Ala					
	565		570		575
Leu Glu Leu Gln Arg Pro Pro Ala Ser Thr Lys Ala Leu Glu Val Lys					
	580		585		590
Leu Ala Tyr Gln Glu Ser Glu Val Ala Ala Leu Leu Lys Lys Ile Pro					
	595		600		605
Leu Gly Pro Ser Glu Met Ser Thr Met Arg Cys Arg Ala Glu Glu Leu					
	610		615		620
Arg Glu Gly Thr Leu Cys Asp Tyr Arg Pro Val Leu Pro Leu Met Leu					
625		630		635	640
Ala Ser Phe Ile Phe Asp Val Leu Cys Ala Pro Val Val Ser Pro Thr					
	645		650		655
Gly Ser Arg Pro Pro Ser Arg Asn Trp Asn Ser Glu Thr Pro Gly Asp					
	660		665		670
Glu Glu Leu Gly Phe Glu Ala Ala Val Ala Ala Leu Gly Met Lys Thr					
	675		680		685
Thr Val Ser Glu Ala Glu His Pro Leu Leu Cys Glu Gly Thr Arg Arg					

690		695		700
Glu Lys Gly Asp Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp				
705	710		715	720
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser				
	725		730	735
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg				
	740		745	750
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser				
	755		760	765
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala				
	770		775	780
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe				
785	790		795	800
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly				
	805		810	815
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro				
	820		825	830
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp				
	835		840	845
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile				
	850		855	860
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser				
865	870		875	880
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly				
	885		890	895
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Ser Asp Ser Leu Gly Ser				
	900		905	910
Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg				
	915		920	925
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser				
	930		935	940
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe				
945	950		955	960
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser				
	965		970	975
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly				
	980		985	990
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala				
	995		1000	1005
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr				
	1010		1015	1020
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser				
1025	1030		1035	1040
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro				
	1045		1050	1055
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser				
	1060		1065	1070
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His				
	1075		1080	1085
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys				
	1090		1095	1100
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu				
1105	1110		1115	1120
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val				

1125 1130 1135
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
 1140 1145 1150
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
 1155 1160 1165
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly
 1170 1175 1180
 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr
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 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
 1205 1210 1215
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
 1220 1225 1230
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
 1235 1240 1245
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
 1265 1270 1275 1280
 His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp
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<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca
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2220
aaaaaaaaaa aaaaaaaaaa aaaa
2244

<210> 2442

<211> 168
 <212> PRT
 <213> Homo sapiens

<400> 2442
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 Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
 20 25 30
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
 35 40 45
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
 50 55 60
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65 70 75 80
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
 85 90 95
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
 100 105 110
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
 115 120 125
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
 130 135 140
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 145 150 155 160
 Lys Lys Lys Lys Lys Lys Lys
 165

<210> 2443
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 2443
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 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
 180
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
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 cgtgccattg ataccatata caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
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 361

<210> 2444
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1 5 10 15
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
 20 25 30
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
 35 40 45
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
 50 55 60
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
 65 70 75 80
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
 85 90 95
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
 100 105 110
 Leu Pro Gly Gly Phe Asp Glu Ala
 115 120

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

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 120
 aggaagcatg tttatcctgt tcagattact gcttctgcca ggctgctgct gctgttgggt
 180
 tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
 240
 tgtatttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgagaggga
 300
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
 360
 aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
 403

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1 5 10 15
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
 20 25 30
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
 35 40 45
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
 50 55 60
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

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<400> 2448
Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu
 1             5             10             15
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp
      20             25             30
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
      35             40             45
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
      50             55             60
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

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65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
          85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
          100          105          110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
          115          120          125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
          130          135          140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
          145          150          155          160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
          165          170          175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
          180          185          190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
          195          200          205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
          210          215          220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
          225          230          235          240
Ser His Asp Glu Val Arg Val Met
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<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

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gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
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120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttcccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

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<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

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Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20          25          30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35          40          45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

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50		55		60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile				
65		70		75
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa				80
	85		90	

<210> 2451

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2451

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 tgcaacgatg atcttgtag cgatgtattg accggtgtgt gggccgatct tgtgggccag
 120
 gagaaggctg tgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctgctcccat
 180acgcatggct cattacgggt ccgcctggat caggctcggtc gaatgctgcg 240
 aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
 300
 cgaaccngcc tgtcaggcgc ccaccttgac gtcaccctcg tgcgtactga ggcgtgtct
 360
 attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
 420
 cggggcgtcc ccagggttgt cgctcgtcga gatgccgacc gcatcactga acgcggagct
 480
 gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
 540
 cctactccag aggacgtcat cgtcacgatc aggtcgagat gtcggcgcc
 589

<210> 2452

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2452

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro				
1		5		10
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala				15
	20		25	30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala				
	35		40	45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu				
	50		55	60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe				
65		70		75
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala				80
	85		90	95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg				
	100		105	110
Thr Glu Ala Leu Ser Ile Gly Val Asp				
	115		120	

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
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 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acaggttggc acacgcacat gcccctgggt atgtctcatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggagggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg
 420
 ccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacagggac caccaggtga catgggtgct gcactaggca
 600
 ggggtggcca gggaatgggt gagggtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130 135 140
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
 145 150 155 160
 Val Thr Trp Val Leu His
 165

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
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 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
 120
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
 180
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgcgct tcatcaacgt gatgtcgtc gcggtggcac cgctgggcgg gttgatcggc
 300
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 360
 ggcacgtcgc ccaagaat
 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
 1 5 10 15
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
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 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggtccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttate aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
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 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg
 1 5 10 15
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp
 20 25 30
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu
 35 40 45
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu
 50 55 60
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile
 65 70 75 80
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser
 85 90 95
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly
 100 105 110
 Met Ser Ile Phe Leu Arg Trp Leu Arg Leu Ile Leu Ile Ser Arg
 115 120 125
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr
 130 135 140
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

145 150 155 160
 Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
 165 170 175
 Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
 180 185 190
 Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
 195 200 205
 Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
 210 215 220
 Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
 225 230 235

<210> 2459
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 2459
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 120
 ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgaccgggcc
 180
 aaggtgaccc gtteggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
 240
 gaagccgtca tcgctgacaa gcccagacct gttaaggctc ccgctggcgg cggtgatatg
 300
 gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
 360
 gggatgccac tttgccccag gc
 382

<210> 2460
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 2460
 Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
 1 5 10 15
 Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
 20 25 30
 Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
 35 40 45
 Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
 50 55 60
 Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
 65 70 75 80
 Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
 85 90 95
 Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
 100 105 110

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
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 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaata tcgaaattca
 120
 cgatgtggta ttcgcagtcg cggatacgtt gcaacacacc tacaccaat tgcgcgacgg
 180
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcacat cctgtacttc
 300
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg
 360
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaattgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcgcttc tgctcgggtg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
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 60
 atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggtct gtgcctcttt ctgcactgct ggtgggtggt gctgttggt
 180
 ggggtgatgga taccggctgc cagagatggc tcaggtgccca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc gggtgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctggtgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2466

Trp	Ile	Pro	Ala	Ala	Arg	Asp	Gly	Ser	Gly	Ala	Ser	Cys	Trp	Ala	Ile
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Ser	Gly	Thr	Gly	Cys	Trp	Ala	Ile	Ser	Gly	Ala	Gly	Cys	Trp	Ala	Ile
		20					25					30			
Ser	Gly	Ala	Gly	Cys	Cys	Trp	Ala	Val	Ser	Gly	Ala	Gly	Cys	Trp	Asp
		35				40						45			
Val	Ser	Cys	Pro	Gly	Thr	Gly	Leu	Ser	Gly	Ala	Gly	Cys	Gln	Leu	Leu
	50					55					60				
Pro	Thr	Leu	His	Trp	Ala	Leu	Gly	Thr	His	Cys	Thr	Arg	Ala	Phe	Pro
65				70				75						80	
Ser	Pro														

<210> 2467

<211> 306

<212> DNA

<213> Homo sapiens

<400> 2467

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 gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggccgggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgtctctgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2468

Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

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      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

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gccggcggtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
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aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagaggggtca ggttggaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcactata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

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<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

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Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
 1             5             10             15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
      20             25             30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
      35             40             45
Gly Glu Leu Lys Val Gly' Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50		55		60	
Lys	Leu	Leu	Ile	Leu	Leu
65				70	
Met	Asn	Gly	Ile	His	Ile
				85	
Val	His	Leu	Tyr	Ser	Ala
				100	
Ala	Asp	Ile	Ala	Ser	Gly
				115	
Asp	Trp	Arg	Pro	His	Asp
				130	
Pro	His	Glu	Ala	Glu	Val
				145	
Val	Arg	Ile	Tyr	Glu	Arg
				165	
Val	Thr	Glu	Asp	Gly	
				180	

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
 60
 cgcactctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccggggca
 120
 ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
 180
 cagctggacc agtatgaggg caaagagtgg acatttatta ttgaaaatga gtctaagggg
 240
 cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
 300
 ntgtccaagt ccnactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct
 360
 gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
 420
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
 480
 tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccggaggc ccgggctcga
 540
 gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
 600
 ggaggggttac ccggggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
 660
 tgcccaggca gtcccaacca acccagcagc ctcaattg
 698

<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
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 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 agccccctcc tggcctgctg gcagcccatc ctctgctggt tgctgggctc agtgcgtgca
 120
 ggctcggcca cgggctgccc gccccgctgc gactgctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgccca tccgggacta ctccttcaag
 720
 aggtgtgacc gactcaaggt cttggagatc tccactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttctcaa cctctctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctggtgg gcgggcagct ggccgggtgg agccctgcct tccgggcct caactacctg
 1020
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca
 1200
 cgccccagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
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Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25				30			
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
			35				40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
			50				55				60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
				85				90					95		
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
			115				120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
			130				135				140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
				145			150			155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

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<400> 2477
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gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggctctga agcggcggcc
180
ctgtccttg ccgtgaccat ggacctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420
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gctgactgtg tgctccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
 480
 ttccctgtca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5					10					15	
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
			20					25					30		
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55				60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70				75					80	
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85					90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100				105						110		
Gly															

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
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 ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481
 <211> 484
 <212> DNA
 <213> Homo sapiens

<400> 2481
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 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc taccctcaa
 300
 gttgctagca gcttagaaga agcgtttaag tgccctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 2482
 Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
 65 70 75 80
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
 85 90 95
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
 100 105 110
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
 115 120 125
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
 130 135 140
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
 145 150 155

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccgagcc tgaggccctt
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 ctggagaaca ggcagcctct gaggaacct ctgatccccg atcagccacc ccatcgcttg
 120
 cgccccagc cgcttctctc tggccttggt ccccttccc tgtgaaggag agaacagttt
 180
 cggtggccc tgagatgctg gcaggcctgc agtcaggga gtgggcgcct cccacctga
 240
 aatggtcctt cggtgtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
 300
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
 360
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
 420
 gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
 477

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
 1 5 10 15
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
 20 25 30
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
 35 40 45
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
 50 55 60
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
 65 70 75 80
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2485

accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
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 aagaccgcgc actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctgctggcca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccggaagt cttcgctgtt ggtaccgccg cggttgtcac accgatcggc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg
 480
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 540
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2486

Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
 100 105 110
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
 115 120 125
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
 130 135 140
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
 145 150 155 160
 Leu Lys Arg Val Cys
 165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

nnccctcag gagagcagcc catggaaggt cccccccaag gggccctga gagccctgac
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 agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
 120
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
 180
 cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg
 240
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
 300
 accttggtaa ggctgctgga cattgaagag gctgtgcac
 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
 1 5 10 15
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
 20 25 30
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
 35 40 45
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
 50 55 60
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
 65 70 75 80
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
 85 90 95
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
 100 105 110
 His

<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
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 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagacctt cgcgatcgga ggcatgaccg gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttccgaattg ctcacttcca caacgtgatc
 240
 atcggcgggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctggggcttc
 360
 ttcgctcgct tcattgccgt ctatgcactg ggtttcatgg gcatgaccg ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgta cgttacgttg ccatggtcgg tgcactgatg
 480
 atcgctgtcg gtatcgccctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgcttggctt attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgacg tgttcgaaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcaccg
 180
 cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcgatgt cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcca gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtccatg gcatcccggt
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
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 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac
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 120
 ctatcgaact acctcatgct cgaacctcat tcgggtcatca agaccatcga ctcttcacct
 180
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagt
 240
 atccccgtgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
 300
 aagggcgcca ggccggggagc cgaccgctct tcctcgggtct acctccagct gacgtcgggtg
 360
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
 1 5 10 15
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
 20 25 30
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccagttgcac cagcagcgct gcggacactc ggggcggcag tcggtctgtc
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agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg
120
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agcccccgcac ctgccgcttg
180
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca cctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg
360
cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctggta tgaacatgtt aaagtcattc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttggtgtccg ttggaacct ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc
720
agtgccacca tgctggctct tgccatggac tgtggggcca actgcttcat gctggacccg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcctta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
aggaagaagt tccccccaga taattcagct ccttatgggg ccggtatgt gggctccatg
960
gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtacct cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca
1140
gacattcacc agaggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
1200
aagggtgatg agaagcactc tgcccagtga gcacctgcc tgctgcac cggagaattg
1260
cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
1320

cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaatgcttg
 1380
 gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagtg
 1440
 gatggaggag aaataaactt attcctcctt aaaaaaaaa
 1478

<210> 2496

<211> 338

<212> PRT

<213> Homo sapiens

<400> 2496

Met	Ala	Asp	Gln	Ala	Pro	Phe	Asp	Thr	Asp	Val	Asn	Thr	Leu	Thr	Arg
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Phe	Val	Met	Glu	Gly	Arg	Lys	Ala	Arg	Gly	Thr	Gly	Glu	Leu	Thr	
			20				25					30			
Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val	Lys	Ala	Ile	Ser	Ser	Ala
		35				40					45				
Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr	Gly	Ile	Ala	Gly	Ser	Thr
	50				55					60					
Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu	Asp	Val	Leu	Ser	Asn	Asp
65					70				75					80	
Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe	Ala	Thr	Cys	Val	Leu	Val
			85						90				95		
Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val	Glu	Pro	Glu	Lys	Arg	Gly
			100					105					110		
Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp
	115						120					125			
Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser
	130					135					140				
Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu	Gln	Pro	Gly	Arg	Asn	Leu
145					150				155					160	
Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser	Ala	Thr	Met	Leu	Val	Leu
			165						170					175	
Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly
		180						185					190		
Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys
	195					200					205				
Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val
	210					215					220				
Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro
225					230				235					240	
Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr
			245						250					255	
Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro
		260					265					270			
Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val
	275					280					285				
Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu
295					300										
Asp	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly
305					310				315					320	
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser

325 330 335

Ala Gln

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
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 60
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgcggtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcgggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgctg
 300
 aacttggggc ttgacgaccg cgctctttcc cagccgttga aaaacctctc ggggtggctg
 360
 cgtcgctcgc tcgagctggc gcgcatactc ttttccgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499

nggccgggcg aagacccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
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 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ccttcgacga tttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
 240
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
			20				25						30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35				40					45				
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50				55				60						
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65				70				75					80		
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
			85				90						95		
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100					105						110		
Asp	Phe	Val	Asp												
			115												

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccac tcaaatcaca
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 taatgcccat taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt
 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatg
 180
 ctttcaagag tcaaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
 240
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacctca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2502
 Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr
 1 5 10 15
 Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr
 20 25 30
 Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser
 35 40 45
 Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile
 50 55 60
 Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His
 65 70 75 80
 Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile
 85 90 95
 Phe Lys Gly His
 100

<210> 2503
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2503
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 aaggccttgc tacctcagca gtccctacagc ttggcccagc cgctgtattc tccagtctgc
 120
 accaatgggg agcgctttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
 ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tggtgcccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
 1 5 10 15
 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
 20 25 30
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505
 tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggttg
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 ccgctcgtgt tgggtccggtt ggctcgggtc accggcgatc ggcgtctgat gggccaatgg
 120
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggtcttc
 180
 aacgtgggtc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttcttg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
 300
 cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag
 360
 tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctcccttg
 420
 cgctcgggtg agtcgtcccg gctgttgtgt cgggtgctgtt gggtaatggt tcgacgaccc
 480
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg
 540

<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1		5		10		15									
Ser	Met	Gly	Leu	Pro	Leu	Val	Leu	Val	Pro	Leu	Ala	Arg	Phe	Thr	Gly
		20					25						30		
Asp	Arg	Arg	Leu	Met	Gly	Gln	Trp	Thr	Asn	Gly	Arg	Val	Met	Ala	Ala
		35					40					45			
Ile	Ala	Trp	Ile	Val	Val	Ala	Ala	Val	Ser	Ala	Leu	Asn	Val	Val	Leu
	50					55					60				
Val	Val	Glu	Thr	Val	Met	Gly	Ala								
65						70									

<210> 2507
 <211> 922
 <212> DNA
 <213> Homo sapiens

<400> 2507
 nacgcgtgaa gggcagagga gagagaccag tgaaggggga ggaggcggcc aaaaggagac
 60
 agcttcatgc cccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
 120
 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
 180
 ttccactggc acttctctca ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
 ttcaactaca gccccgacgt gtactgtctc aagtacaacg aagccaccgg cgtgtgcccc
 300
 gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
 360
 ctgcgttact acaaaacagg aacctgcac cagcagacag acgcacgtgg ccactgcgtg
 420
 aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc ccctgtctac
 480
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
 540
 agcatagagg gccagtcggc tggggctgcg agccatgcca tgatagaaaa gatcctcagc
 600
 gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
 660
 aagaagcccc cgggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctcg ctccatgtcc aaacgtcaag
 780
 cacggggatg agtggggaga cctggcaag tgtgagaacg gagacgcctg ccagtactgc
 840
 cacacccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
 900
 aggggggggg gggtagggga gg
 922

<210> 2508
 <211> 278
 <212> PRT
 <213> Homo sapiens

<400> 2508
 Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1 5 10 15
 Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20 25 30
 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35 40 45
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50 55 60
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65 70 75 80
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85 90 95
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
 100 105 110
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
 115 120 125
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
 130 135 140
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
 145 150 155 160
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
 165 170 175
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
 180 185 190
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
 195 200 205
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
 210 215 220
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
 225 230 235 240
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
 245 250 255
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
 260 265 270
 Gly Gly Gly Val Arg Glu
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<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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 gttcatgaac gggtaggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
 180
 cggcagggtt cggagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
 240
 caccgctccc agcgaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
 300

gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
		20						25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50				55					60					
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70				75				80		
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
			85					90					95		
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100					105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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gcattacgcc caggacgcgt tgcctggcctg gcggagatcg tcgtcaacgg tcaacctttt
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360
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420
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480
accgtgcata gcgccctcaa cgatgcggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagctat gatcattgag
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660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

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 120
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 240
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 360

ggaagggtg
368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2514
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
50 55 60
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
65 70 75 80
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
85 90

<210> 2515
<211> 351
<212> DNA
<213> Homo sapiens

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120
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc
180
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct
240
ctgggtgcag gtgggcagac aatgggccaac cacacccct cagccccgct ccagtatcag
300
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351

<210> 2516
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2516
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr
1 5 10 15
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser
20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
 65 70 75 80
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
 85 90 95
 Thr Arg

<210> 2517
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 2517
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 ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga
 120
 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
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 240
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 356

<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2518
 Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
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 Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
 20 25 30
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
 35 40 45
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
 50 55 60
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
 65 70 75 80
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
 85 90 95
 Pro Ser Ser Thr Gly Gln Thr
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<210> 2519
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 2519

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 180
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 660
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 720
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 830

<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

Met Ser Pro Ala Arg Arg Cys Leu Gly Leu Gly Pro Glu Asn Phe Gly
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 Glu Glu Val Gly Leu Leu Cys Asn Cys Leu Val Pro Phe Lys Val Ile
 20 25 30
 Leu Pro Cys Trp Gly Arg Cys Ser Ser Ser Phe Gln Arg Arg Lys Arg
 35 40 45
 Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
 50 55 60
 Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
 65 70 75 80
 Gly Leu Ala Pro Gly Leu Ser Gly Lys Arg Glu Glu Glu Leu Arg Leu
 85 90 95
 Arg Gly Ala Val Leu Pro Arg Arg Leu Thr Gly
 100 105

<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

<400> 2521
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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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 Ala Pro Leu Ala Leu Val Gly Val Thr Leu Leu Leu Ala Ala Pro Pro
 35 40 45
 Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala
 50 55 60
 Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys

65					70					75					80
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115					120					125			
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
		130				135					140				
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
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Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
			165					170					175		
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
		180						185				190			
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
		195				200					205				
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
	210					215					220				
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225					230					235				240	
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
			245					250					255		
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
		260						265				270			
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
		275				280					285				
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
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Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
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Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
			325					330					335		
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
		340						345				350			
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
	355					360					365				
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
	370				375						380				
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385					390					395				400	
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
			405					410					415		
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
		420						425				430			
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
	435					440					445				
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
	450					455					460				
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465				470					475					480	
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
			485					490				495			
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg

500										505					510				
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp				
		515					520					525							
Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr				
		530					535				540								
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp				
545					550					555					560				
Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val				
				565					570						575				
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr				
			580					585						590					
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys				
		595					600					605							
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val				
		610					615					620							
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile				
625					630					635					640				
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu				
				645					650						655				
Leu	Asn	Gln	Gly	Asp	Gly	Asp	Arg	Lys	Leu	Thr	Ala	Glu	Glu	Glu	Glu				
			660					665						670					
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys				
		675					680					685							
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val				
		690					695					700							
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His				
705					710					715					720				
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp				
				725					730						735				
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys				
			740					745					750						
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe				
		755					760					765							
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly				
		770					775					780							
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu				
785					790					795					800				
Ala	Ser	His	Phe		Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala			
				805						810					815				
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser				
			820					825						830					
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn				
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930 935 940
Ala Tyr Cys His Ile Arg Gly Phe
945 950

<210> 2523
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2523
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120
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattggaaa ccagttaatt
180
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gttagcggaa
240
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa
300
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc
360
ggagaagtcg aattggccac cttgcggnnn nn
392

<210> 2524
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2524
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe
1 5 10 15
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
20 25 30
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
100 105 110
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
115 120 125
Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2525
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 tcccccttga atacgtgggtg ctgtcaccgc cgcggaatc aagaaccgca cgttgcgcaa
 120
 atcgtgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa
 180
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggcttg
 240
 gaagtcagcg gtgcgccccg acgcctgcga tttcgggtga agacgcgca ctaccattca
 300
 gaactgggtg ccgcaacact cattcgcagc gagaagccc ccgatttgcc caacacctat
 360
 caatacggcg tggaattc
 378

<210> 2526
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2526
 Met Ala Val Cys Arg Ile Pro Phe Glu Tyr Val Val Leu Ser Pro Pro
 1 5 10 15
 Arg Glu Ser Arg Thr Ala Arg Cys Ala Asn Arg Cys Ala Thr His Gln
 20 25 30
 Arg Gly Arg Gln Asp Val Gly Gln Arg Arg Ala Pro Xaa Met Ile His
 35 40 45
 Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg
 50 55 60
 Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp
 65 70 75 80
 Ala Arg Leu Pro Phe Arg Thr Gly Gly Arg Asn Thr His Ser Gln Arg
 85 90 95
 Glu Ala Arg Arg Phe Ala Gln His Leu Ser Ile Arg Arg Gly Ile
 100 105 110

<210> 2527
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 2527
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 cagatccaga gagacgacct tggagccagt cccagagca gcagccagcc agaccacggc
 120
 cgctctctcc cccagaagc tcccgacagg ccacatctt ccacggcctc cgagacctca
 180
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg
 240
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcg catccccca
 300

cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala
1 5 10 15
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
100

<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
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tgtgtctctcc gtgccccccg agtggcctgc tagcccgctc tcccacacag tctccttgat
120
gtgaagtgtc acccggttg ctgcggcgtg tctccgccgt aacacgtgta taccgggtca
180
gccatggcgg cggtctgtgg gaaggctcct gcgtatgggt ttgccatccg ggaccggggc
240
tttgcctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca
300
cgtttgtgtc tttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag
360
ccatgagctc cacagggtcc tgaggga
387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu
1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser


```

      20      25      30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35      40      45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50      55      60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65      70      75      80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85      90      95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100      105      110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
      115      120

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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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tctagagata caaaaagtag tctatacact gagagacatc tggataaata caaagggtga
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gctttccaac cagctgaaga tgacaagact aaaccccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
180
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatcctt taggtctcaa ttcttttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg cttccaggc agggctcctgc
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396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
1      5      10      15
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
      20      25      30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2533
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 120
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg
 180
 gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
 240
 ttcgtgcct atgaggcagt gctgaggctc gcccggggctc tgctcacata gccggtcccc
 300
 acgcccagcg gccacccac cagcagctgc tggaggctcg agtggctgga ggaggcaagg
 360
 ggtagtgtgg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc
 420
 ctgcagtgtt gtcggccgag gcctgagctc gccctgcca gctactgacc tcaggctcag
 480
 gggcccgcca gccat
 495

<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
 1 5 10 15
 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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cgtcggtggt aggctgctac catgaggttg aatcagaaca ccttgctgct ggggaagaag
120
gtggtccttg taccctacac ctcgagcat gtgcccagca ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg cccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc
360
ttcctcacag atctagaaga ccccaccttg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg
480
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc
540
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggaggtg
600
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgctg
720
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780
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900
gccagttccc ttctccctc ccggccaaac ccagaccag actctaggaa gctggaatgg
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1020
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1080
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1140
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1200
gcagaggcag gctggtgtga ccctgggaac ttgaccggg aacaacaggt ggtccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga
1320
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat
1380
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1440
tcaggccatc agctctgtcc ctctggtgct cccacgtctg ttccctaccc tccatctctg
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1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg
1620
ggagcactct gactcctaac agtcttcctt gccctgcat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca
 1740
 ggtggggaaa cagtcttaga taagtaaggt gacttgcta aggcctccca gcacccttga
 1800
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 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaaag tact
 1904

<210> 2536
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 2536
 Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu
 1 5 10 15
 Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met
 20 25 30
 Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu
 35 40 45
 Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys
 50 55 60
 Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly
 65 70 75 80
 Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr
 85 90 95
 Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu
 100 105 110
 Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met
 115 120 125
 Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys
 130 135 140
 Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His
 145 150 155 160
 Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg
 165 170 175
 Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser
 180 185 190
 His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys
 195 200 205

<210> 2537
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 2537
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 gatgtcatcg tgctgcgggtt ttccggagcc atggcgaagc gtccctgctc agttatcctt
 120
 ccgctgctac tgctcggaactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac
 180

ctcgcctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctcgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagtgcgc tcgggtagag tcagccgcgc gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2538
 Thr Arg Ser Arg Lys Asp Lys Leu Asp Ala Glu Val His Ala Gly Glu
 1 5 10 15
 Gly Thr Pro Gly Asp Val Ile Val Leu Arg Phe Ser Gly Ala Met Ala
 20 25 30
 Lys Arg Pro Ala Ser Val Ile Leu Pro Leu Leu Leu Ser Asp Ser Pro
 35 40 45
 Val Ile Ala Trp Trp Pro Phe Ser Gly Pro Asp Asn Leu Ala Ser Asp
 50 55 60
 Pro Ile Gly Ala Leu Ala Asp Arg Arg Ile Thr Asp Ser Ala Ala Asp
 65 70 75 80
 Lys Asp Pro Cys Lys Ala Leu Ile Arg Arg Ala Ala His Leu Thr Glu
 85 90 95
 Gly Asp Ser Asp Leu Cys Trp Ala Arg Thr Thr Ser Trp Arg Ala Leu
 100 105 110
 Ala Ala Ala Ala Leu Asp Gln His Pro Ala Thr Val Lys Phe Ala Arg
 115 120 125
 Val Glu Ser Ala Ala Gly Asn Ala Pro Ala Met Leu Leu Ala Ala Trp
 130 135 140
 Leu Gly Leu Arg Leu Gly Val Pro Val Glu Arg Val Thr Thr Asp Ala
 145 150 155 160
 Pro Gly Ile Ser Ala Ile Val Met Ser
 165

<210> 2539
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 2539
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 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg
 180

gggccccga tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttcggga cgtcgcatgg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatata ccggcggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
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Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20						25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65					70					75				80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120						125		
Asn	Leu	Leu	Asn	Lys	Arg										
															130

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

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 ccctgcatgg aaccatttgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaa
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc atttgtact
 300
 caaatattcg gottccataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagtctt cactgttctg cgtgcccage ccctcacact ggacgcccac ctcacactct
 480
 tctgccaaagg gagacttttg ttctcccctt ccctgtgctg gctgtgcggg ccacagtctt
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 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2542

Met	Leu	Cys	Thr	His	Phe	Leu	Ile	Phe	Cys	Val	Glu	Ser	Thr	Ser	Phe
1				5				10						15	
Cys	Thr	Gln	Ile	Phe	Gly	Phe	His	Asn	Lys	Leu	His	Cys	Ser	His	Leu
		20					25					30			
Lys	Ile	Phe	Ile	Thr	Arg	Glu	Thr	Thr	Ala	Trp	Tyr	Arg	His	Pro	Ser
		35				40					45				
Gly	Met	Ser	Arg	Thr	Glu	Ala	Asp	Ile	Cys	Ala	Gln	Phe	Ser	Leu	Phe
	50				55					60					
Cys	Val	Pro	Ser	Pro	Ser	His	Trp	Thr	Pro	Thr	Ser	His	Ser	Ser	Ala
65				70					75					80	
Lys	Gly	Asp	Phe	Gly	Ser	Pro	Leu	Pro	Cys	Ala	Gly	Cys	Ala	Gly	His
		85						90						95	
Ser	Pro	Leu	His	Ala	Ser	Ser	Met	Thr	Arg						
		100						105							

<210> 2543

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2543

cgctgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg
 60
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattattt tcgtgctgcc cggacttata atggctcggct ggtggtcagg tttcccgta
60
tggaaccaccc tcgtatctg tctagtcggc ggcacccctc gcgttatgta ctgattccg
120
ctgcgtcggg cctcgtgac aggcctcgat cttccctacc cggaggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgca
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tggtgtcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```



```

65          70          75          80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
          85          90          95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
          100          105          110

```

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

```

<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacia gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcactttctc tttacttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacia aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctcccttgga taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100          105

```

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
 nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacgggtgtt
 60
 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
 300
 ggttctgggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551
 nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga
 60
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggctaggct acgtccatg
 120
 ctccccagc aatctctgtc tacacctctc gcggcgctt gccctctctc gaccccttc
 180
 cagccannaa gtccccccac cccttcagag aagcagctc aaattccaga agtggaggct
 240
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg
 300
 gcctctggac tgccaggctg ggttggggac caggaacat cggctctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagtggct ccatcctgga can
 403

<210> 2552
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2552
 Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
 1 5 10 15
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 2553
 actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
 60
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcatectccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg
 240
 gacctctctg gccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggacccct gtcttacaca cttctcact
 360
 gagcctgcc gcatcccagn
 380

<210> 2554
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2554
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
 1 5 10 15
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
 20 25 30
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
 35 40 45
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
 50 55 60
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
 65 70 75 80
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
 85 90 95
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
 100 105 110

<210> 2555
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2555
 ntccggatgg aaaagtaaag accagcaata gccataaag ccattaacac atacccatat
 60
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga
 120
 gataacgcga ataatggtag tgctcgttcta gtgctcacag acctggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgctcgttg gcctcggcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cacgcggn
 368

<210> 2556
 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagagccg
60
attgatgaga tgggcccgagt taacgcgaaa gaaaaatggg aaattcacccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtagcttgat
180
cttcttgac cttacgcaaa gggtaggcaag atcggtctct tcggtaggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

65		70		75		80									
Lys	Thr	Val	Leu	Ile	Gln	Glu	Leu	Ile	Arg	Asn	Ile	Ala	Thr	Glu	His
			85						90					95	
Gly	Gly	Tyr	Ser	Val	Phe	Ala	Gly	Val	Gly	Glu	Arg	Thr	Arg	Glu	Gly
		100						105					110		
Asn	Asp	Leu	Trp	Val	Glu	Met	Lys	Glu	Ser	Gly	Val	Ile	Ala	Lys	Thr
		115					120						125		
Ala	Leu	Val	Phe	Gly	Gln	Met	Asn								
		130					135								

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgctgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aagggtgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

Ser	Leu	Lys	Met	Asn	Ile	Phe	Arg	Leu	Gln	Thr	Glu	Lys	Asp	Leu	Asn
1				5				10						15	
Pro	Gln	Lys	Thr	Ala	Phe	Leu	Lys	Asp	Arg	Leu	Asn	Ala	Ile	Gln	Glu
			20					25					30		
Glu	His	Ser	Lys	Asp	Leu	Lys	Leu	Leu	His	Leu	Glu	Val	Met	Asn	Leu
			35				40					45			
Arg	Gln	Gln	Leu	Arg	Ala	Val	Lys	Glu	Glu	Glu	Asp	Lys	Ala	Gln	Asp
			50				55				60				
Glu	Val	Gln	Arg	Leu	Thr	Ala	Thr	Leu	Lys	Ile	Ala	Ser	Gln	Thr	Lys
65					70					75				80	
Lys	Asn	Ala	Ala	Ile	Ile	Glu	Glu	Glu	Leu	Lys	Thr	Thr	Lys	Arg	Lys
			85						90					95	
Met	Asn	Leu	Lys	Ile	Gln	Glu	Leu	Leu	Glu	Met	Thr	Ser	Phe	Pro	Ser
			100						105					110	
Trp	Leu	Lys	Lys	Ile	Arg	Thr	Cys	Arg	Ile	Ser	Phe	Asn	Arg	Asn	Met
			115				120						125		

Lys

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
 nnactcacca ctgtgggttct actatgcctt ctgaccccggt cttggacttc aactgggaga
 60
 atgtggagcc atttgaacag gtcctctctt tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 taaaaatgca aagcccaagt taccagctgt taaaaatata gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563
 ggatcccaga cgagtgtctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
 60
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggccttta ccctttggga acaggcagag gccctcaca ggaagaacaa agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctggg
 240
 cactacacaa ggcagggcct ccagcgg
 267

<210> 2564
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 2564
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr
 1 5 10 15
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr
 20 25 30
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln
 35 40 45
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser
 50 55 60
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val
 65 70 75 80
 His Tyr Thr Arg Gln Gly Leu Gln Arg
 85

<210> 2565
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2565
 ctctgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
 60
 tgggtcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccctcgat
 120
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatcgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgtg accgggcgtg gggtgaccat ccacccccat
 300
 tccttctgc ccgaccagca cgccaatgtg cac
 333

<210> 2566
 <211> 111
 <212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
      20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
      35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
      50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
      85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
      100            105            110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tgggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1             5             10             15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
      20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
      35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
      50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65          70          75          80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
          85          90          95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
          100          105          110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
          115          120          125
Thr Asp Thr Arg
          130

```

<210> 2569
 <211> 330
 <212> DNA
 <213> Homo sapiens

```

<400> 2569
cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
60
tacctcgctcg ccgatagagt tgtcgtgacc accaagcaca acgatgacga gcagtacgtg
120
tgggagtgccc aagcggggcgg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcagggggca ctaagatcac actgttcctc aaggacgac agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggaactgaaa agacaacaga gaaggaaatt
330

```

<210> 2570
 <211> 110
 <212> PRT
 <213> Homo sapiens

```

<400> 2570
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1          5          10          15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
          20          25          30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
          35          40          45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
          50          55          60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65          70          75          80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
          85          90          95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
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<210> 2571
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2571
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240
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<211> 111
<212> PRT
<213> Homo sapiens

<400> 2572
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Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu
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35 40 45
Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser
50 55 60
Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr
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100 105 110

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<211> 460
<212> DNA
<213> Homo sapiens

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360

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<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
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 20 25 30
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 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
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<210> 2575
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 <213> Homo sapiens

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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85				90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
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Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165				170						175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
		180					185						190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195					200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
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Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
			245					250						255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265					270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275					280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
			325					330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340					345						350	
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355	360	365
Leu Asp Val Val Ala Gly Ser Val Thr Val	Leu Ser Gly Arg Arg Gly	
370	375	380
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly	Gly His Pro Pro Gly Tyr	
385	390	395
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu	Glu Asp Arg Phe Asn Ser	400
405	410	415
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu	Ser Trp Pro Gly Ala Pro	
420	425	430
Gly Gly Leu Ser His Trp Leu Pro Ala Ala	Arg Gly Arg Leu Glu Gln	
435	440	445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly	Glu Leu Gly Gly Arg Leu	
450	455	460
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala	Met Gln Ala Cys Gly Gln	
465	470	475
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp	Ser Gln Val Ser Glu Ile	480
485	490	495
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp	Ser Glu Gly Gln Leu Arg	
500	505	510
Leu Val Gly Ser Gly Leu His Thr Val Glu	Ala Ala Gly Glu Ala Arg	
515	520	525
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val	Val Gly Arg Leu Gln Asp	
530	535	540
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala	Glu Phe Thr Leu Arg Leu	
545	550	555
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu	Glu Gly Leu Leu Gln Ala	
565	570	575
His Gly Asp Glu Gly Cys Gly Ala Cys Gly	Gly Val Gln Glu Glu Leu	
580	585	590
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys	Ser Cys Pro Leu Leu Pro	
595	600	605
Pro Arg Gly Pro Gly Ala Gly Pro Gly Val	Gly Gly Pro Ser Arg Gly	
610	615	620
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly	Ser Ser Gly Ser Ala Leu	
625	630	635
Gln Ala Leu Gln Gly Glu Leu Ser Glu Val	Ile Leu Ser Phe Ser Ser	
645	650	655
Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr	Thr Val Glu Gly Gln Gly	
660	665	670
Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys	Asp Arg Ile Ile Ser Glu	
675	680	685
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu	His Ala Thr Glu Ser Glu	
690	695	700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln	Ala Gln Ala Gly Gln Cys	
705	710	715
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu	Glu Gly Val Cys Glu Arg	
725	730	735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly	Leu Arg Glu Gly Leu Ser	
740	745	750
Arg His Val Ala Gly Leu Trp Ala Gly Leu	Arg Glu Thr Asn Thr Thr	
755	760	765
Ser Gln Met Gln Ala Ala Leu Leu Glu Lys	Leu Val Gly Gly Gln Ala	
770	775	780
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn	Ser Ser Leu Gln Leu Leu	

785		790		795		800
Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala						
	805		810		815	
Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly						
	820		825		830	
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro						
	835		840		845	
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro						
	850		855		860	
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro						
	865		870		875	880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp						
	885		890		895	
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala						
	900		905		910	
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys						
	915		920		925	
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp						
	930		935		940	
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu						
	945		950		955	960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro						
	965		970		975	
Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu						
	980		985		990	
Ala His Ser Glu Glu Pro Leu Thr Ile Phe Ser Gly Ala Leu Leu Tyr						
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<210> 2577

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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120

tgctgagcaa attacgaggg tcaacaggag cagggcagac gcttctccca cctgctggcc
180

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240

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343

<210> 2578

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2578

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          20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
          35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
          50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
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Ser Asn Arg Pro
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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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420

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<210> 2580

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2580

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
          20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
          35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
          50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

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 Glu Lys Thr Tyr Val His Arg Ile Gly
 145 150

<210> 2583
 <211> 7098
 <212> DNA
 <213> Homo sapiens

<400> 2583
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<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

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<213> Homo sapiens

<400> 2585

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Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
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Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
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Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
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<213> Homo sapiens

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acgatcgctt acgtcggggc gctgggcatc gacgccaagc tggctctgcc ggccaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattgggagc agtgcgccac
300
gactatgcca agatgatctc gctggctcag accggacggc tggacctggg cgggatgatc
360
acgcgt
366

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<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

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Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
1           5           10           15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20           25           30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35           40           45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115             120

```

<210> 2591
 <211> 341
 <212> DNA
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tctgtctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gaggtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag gggtgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

```

<210> 2592
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
100     105

```

<210> 2593
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggaatgatat tatcgggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggaccte
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10				15		
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55				60					
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65				70				75			80				
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85					90					95		
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
		100						105					110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115					120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
		130				135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150				155					160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
					165										

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595

agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggtg gcccctgcct
 60
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
 120
 gtcacaattt ctggggctca ctcatataac accaacaacaaat gggatatttg tgaagaactt
 180
 cgcttgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggcgg actgcactgc caactggaga gaaaaatgga gtaaagttcg agctgaaagg
 300
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaata
 420
 gttacccagg atctgaagct tcttggttc gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaat gcataagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caagggtggtg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

100 105 110
 Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
 115 120 125
 Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
 130 135 140
 Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
 145 150 155 160
 Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
 165 170 175
 Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
 180 185 190
 Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
 195 200 205
 Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
 210 215 220
 Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
 225 230 235 240
 Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
 245 250 255
 Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
 260 265 270
 Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
 275 280 285
 Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
 290 295 300
 Gly Gln His Asn Asp
 305

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
 60
 ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
 120
 ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
 180
 tcctttaata atgagatgtc tttaacaagt tttgggcaag agtggtatgg ctgacctggt
 240
 gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctagggtg ggaaaggcac
 300
 aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
 360
 caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
 420
 gccgagtttc ataggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
 480
 ggtgagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccaggggt
 540
 caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggt
 600

tcactccacg agtgcatttt cacttacgcg t
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65          70          75          80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85          90          95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100          105          110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

```

gcgcgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgcgc
  60
tacttgatca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
  120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
  180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccgc cgaactgttg
  240
gccgccaaga gcgtggccga cctggtggag tggtcggtg gcttggtgcaa cccgcccgc
  300
aagttcagga gctggtaaat gcgcgcctt
  329

```

<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1          5          10          15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20          25          30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35          40          45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50          55          60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65          70          75          80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85          90          95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100          105

```

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccagggtcg gtggtcagga
 60
 gcatcgggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
 120
 gggtgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
 240
 tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
 360
 cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala
 1 5 10 15
 Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile
 20 25 30
 Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly
 35 40 45
 Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala
 50 55 60
 His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys
 65 70 75 80
 Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp
 85 90 95
 Leu Gly Val Gly Ala Gln Pro
 100

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggaggagg ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acatttttca
 60
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccactttctc
 120
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
 240
 caaagtacct cctctgaggg gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg
 60
 tttttatgct gttttttttt ttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca
 180
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaannn anacccccaa aaaaaccxaa aaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

```

      20      25      30
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
      35      40      45
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
      50      55      60
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe Phe
65      70      75      80
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
      85      90      95

```

<210> 2609
 <211> 305
 <212> DNA
 <213> Homo sapiens

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<400> 2609
ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgac cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcatctg
180
tgaaagttct acctcggggg cgtcatctcg gctgtcatcg tcggcaaadc actcagctgg
240
ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

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<210> 2610
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 2610
Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
1      5      10      15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
      20      25      30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
      35      40      45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
      50      55      60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65      70      75      80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
      85      90      95
Thr Thr

```

<210> 2611
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2611
 gccgccgcga tcgacggcga ctccctcgacc agctgggtgt ccagctcgct gcaaaccgct
 60
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg
 120
 acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac
 240
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 2613
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggcctgggcc ctgggcatca
 60
 ttctcctcct ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga
 120
 tatgccccta ctgggaagggt ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg
 180
 ctgggaagca ctctgtcttt tctgtgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctctcctctg gagggagaaa ggagggctcg cctccaggtc tcaggctgag ggagtgggct
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggccccc tcccaggtc tcctcgtggc aggcagggac ttgggccage atgg
 414

<210> 2614
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2614
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
 1 5 10 15
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
 20 25 30
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
 35 40 45
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
 50 55 60
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
 65 70 75 80
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
 85 90 95
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
 100 105

<210> 2615
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2615
 nnngccgccg cctcggccg cagcgcgctt cttttgcgc ncgacgtcag ccagaaggcg
 60
 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tatcctcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgacg tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgcg gccaggccgc ggcgcgcgag
 240
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacggtgcg cgct
 394

<210> 2616
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 2616
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val


```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

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<210> 2617
 <211> 513
 <212> DNA
 <213> Homo sapiens

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<400> 2617
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120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttgcccc caacggttct gggaagacca ccctggtacg cacgttatgc
240
ggagccctct cccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcatacct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
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tgcttcgccg atcgacgcgt caccactctc tca
513

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<210> 2618
 <211> 171
 <212> PRT
 <213> Homo sapiens

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<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
      145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

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<210> 2619
 <211> 348
 <212> DNA
 <213> Homo sapiens

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<400> 2619
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cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcgggcggtc acccttacgg ctcggtgtac cccgggccga ttggtgcggg gctcaatccg
300
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348

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<210> 2620
 <211> 116
 <212> PRT
 <213> Homo sapiens

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<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu His Val Ile Phe Leu Asp Asn
      35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

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	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
		100						105					110		
Leu	Pro	Tyr	Ala												
		115													

<210> 2621
 <211> 1485
 <212> DNA
 <213> Homo sapiens

<400> 2621
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 120
 ttttctttcc ctgttttgat ttgctgaag ggagaggtgg tggtaggttag gatcagagct
 180
 ctccctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac
 240
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 480
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 720
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 1140
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 1260

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 1320
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 1380
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<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
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Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20				25					30			
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
			35				40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55					60				
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70				75					80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120
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 420
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1020
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg
1080
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 3360
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 3420
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<210> 2624

<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser
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 Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly

[illegible]

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Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu
470              475              480
Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser
      485              490              495
Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu
      500              505              510
Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser
      515              520              525
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu
      530              535              540
Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met
545              550              555              560
Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp
      565              570              575
Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu
      580              585              590
Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln
      595              600              605
Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp
      610              615              620
Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu
625              630              635              640
His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr
      645              650              655
Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu
      660              665              670
Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His
      675              680              685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu
      690              695              700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe
705              710              715              720
Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro
      725              730              735
Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu
      740              745              750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu
      755              760              765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser
      770              775              780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser
785              790              795              800
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro
      805              810              815
Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala
      820              825              830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr
      835              840              845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser
      850              855              860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu
865              870              875              880
Pro Cys Ser Thr Arg Val Lys Thr Pro Thr Ser Gln Ser Tyr Arg

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885

890

895

<210> 2625

<211> 1398

<212> DNA

<213> Homo sapiens

<400> 2625

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120
ttgtgggaag tatagggcgg caagcggagg aggcgtggcg agcggatcat ccgcttccgg
180
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1260
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1380

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atatttcagt gtgcgaaa
1398

<210> 2626
<211> 137
<212> PRT
<213> Homo sapiens

<400> 2626
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20 25 30
Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val
35 40 45
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
50 55 60
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
65 70 75 80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
85 90 95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
100 105 110
Lys Arg Ala Arg Glu Val Leu Leu Ala Ser Gln Lys Thr Asp Ala Glu
115 120 125
Ala Thr Asp Thr Glu Ala Thr Glu Thr
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<210> 2627
<211> 320
<212> DNA
<213> Homo sapiens

<400> 2627
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120
tgcagtcagc cctagccttt ttgggaacag agaatgatgt tgaactgaag ggggcgctag
180
atttagaaac ctgtgagaag caagatataa tgccagaagt ggacaagcag tctgggttcgc
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ttgaatatta cctgacttag
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<210> 2628
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2628
Met Phe Ser Val Phe Ser Thr Arg Leu Ser Gly Glu Pro Asp Cys Leu

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Ser Thr Ser Gly Ile Ile Ser Cys Phe Ser Gln Val Ser Lys Ser Ser
      20           25           30
Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
      35           40           45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
      65           70           75           80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala
      85           90

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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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300
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540
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650

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<210> 2630

<211> 58

<212> PRT

<213> Homo sapiens

<400> 2630

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Met Asp Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
      1           5           10           15
Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
      20           25           30
Lys Cys Ala Asn Asp Val Phe Gln Val Gly Ala Arg Asp Gly Gln Gly
      35           40           45
Gln Val Lys Gln Cys Arg Pro Val Gly Asp

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50

55

<210> 2631
<211> 5124
<212> DNA
<213> Homo sapiens

<400> 2631
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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 210 215 220
 Tyr Glu His Ile Cys His Phe Arg Asn Arg Pro Tyr Val Phe Leu Ser

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 260 265 270
 Glu Ser Tyr Ile Phe Lys Ile Val Pro Met Leu Asn Pro Asp Gly Val
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<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<210> 2634

<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<212> DNA

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 <212> PRT
 <213> Homo sapiens

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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
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Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
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Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
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Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
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Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
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Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
165 170 175
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Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
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210 215 220
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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<210> 2639

<211> 3777

<212> DNA

<213> Homo sapiens

<400> 2639

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<212> PRT

<213> Homo sapiens

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Arg His Ser Ser Leu Leu Ile Glu His Gln Ala Leu His Ala Gly Glu		
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Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser		
405	410	415
Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys		
420	425	430
Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		
435	440	445
His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		
450	455	460
Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
465	470	475
His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		
485	490	495
Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys		
500	505	510
Thr Pro Tyr Glu Cys Gln Glu Cys Gly Glu Arg Phe Ile Cys Gly Ser		
515	520	525
Thr Leu Lys Cys His Glu Ser Val His Ala Arg Glu Lys Gln Gly Phe		
530	535	540
Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys		
545	550	555
Cys Phe Lys Cys Asn Lys Cys Glu Lys Thr Phe Ser Cys Ser Lys Tyr		
565	570	575
Leu Thr Gln Tyr Glu Arg Ile His Thr Arg Gly Val Lys Pro Phe Glu		
580	585	590
Cys Asp Gln Cys Gly Lys Ala Phe Gly Gln Ser Thr Arg Leu Ile His		
595	600	605
His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln		
610	615	620
Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		
625	630	635
Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
645	650	655
His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn		
660	665	670
Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr		
675	680	685
Leu Val Gln His Glu Arg Thr His Ala Arg Lys Lys Pro Leu Val Cys		
690	695	700
Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His		
705	710	715
Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		
725	730	735
Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His		
740	745	750
Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
755	760	765
Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys		
770	775	780
Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

785					790					795					800
Leu	Thr	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ser	Cys
				805					810					815	
Asn	Val	Cys	Gly	Lys	Ala	Phe	Val	Leu	Ser	Ala	His	Leu	Asn	Gln	His
			820					825					830		
Leu	Arg	Val	His	Thr	Gln	Glu	Thr	Leu	Tyr	Gln	Cys	Gln	Arg	Cys	Gln
		835					840					845			
Lys	Ala	Phe	Arg	Cys	His	Ser	Ser	Leu	Ser	Arg	His	Gln	Arg	Val	His
	850					855					860				
Asn	Lys	Gln	Gln	Tyr	Cys	Leu									
865						870									

<210> 2645

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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 120
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 180
 atgaccgggc tgctgggcta cgtggacccc ctggatccca gctttgtggc tgccgtcatc
 240
 accatcacct tcaatccgct ctactggaat gtggttgac gatgggaaca caagaccgcg
 300
 aagctgagca gggccttcgg atccccctac ctggcctgct actctctaag catcaccatc
 360
 ctgctcctga acttctcgcg ctgcactgc ttacgcagg ccatgctgag ccagcccagg
 420
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 720
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 780
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 900
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<210> 2646

<211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2646
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
 165 170 175
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
 195

<210> 2647
 <211> 1368
 <212> DNA
 <213> Homo sapiens

<400> 2647
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 120
 gcaactactg ctggaatcct tgcaacactt tctcattgta ttgaactaat ggttaaacgt
 180
 gaggacagct ggcagaagag actggataag gaaactgaga agaaaagaag aacagaggaa
 240
 gcatataaaa atgcaatgac agaacttaag aaaaaatccc actttggagg accagattat
 300
 gaagaaggcc ctaacagtct gattaatgaa gaagagttct ttgatgctgt tgaagctgct
 360
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 420
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 480

aaggttgaag agatggtgca gaaccacatg acttactcat tacaggatgt aggcggagat
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660
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720
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780
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840
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1080
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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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20 25 30
Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu Ala
35 40 45
Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp
50 55 60
Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu
65 70 75 80
Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly
85 90 95
Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu
100 105 110
Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu
115 120 125
Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130 135 140
 Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln
 145 150 155 160
 Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp
 165 170 175
 Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
 180 185 190
 Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
 195 200 205
 Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
 210 215 220
 Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
 225 230 235 240
 Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile
 245 250 255
 Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu
 260 265 270
 Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro
 275 280 285
 Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro
 290 295 300
 Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys
 305 310 315 320
 Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp
 325 330 335
 Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
 340 345 350
 Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro
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 370 375 380
 Lys Pro Ile Leu Phe
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<210> 2649

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 2649

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 120
 gatgcctggg gcccatggag tgaatgctca cgcacctgcg ggggtggggc ctcctactct
 180
 ctgaggcgct gcctgagcag caagagctgt gaaggaagaa atatccgata cagaacatgc
 240
 agtaatgtgg actgcccacc agaagcaggt gatttccgag ctcagcaatg ctcagctcat
 300
 aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgaccctgac
 360
 aacccatgtt cactcaagtg ccaagccaaa ggaacaaccc tggttgttga actagcacct
 420

aaggctcttag atggtacgcg ttgctataca gaatctttgg atatgtgcat cagtgggttta
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600
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660
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720
ggtgaaaaca gtctcagctc cacaggaact ttccttggg acaattctag tgtggacttc
780
cagaaatttc cagacaaaga gatactgaga atggctggac cactcacagc agatttcatt
840
gtcaagattc gtaactcggg ctccgctgac agtacagtcc agttcatctt ctatcaaccc
900
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1299

<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50					55					60				
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65				70					75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85						90					95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
		100						105					110		
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115					120					125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

130	135	140
Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu		
145	150	155
Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu		160
	165	170
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val		175
	180	185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr		190
	195	200
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys		205
	210	215
Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys		220
225	230	235
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser		240
	245	250
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala		255
	260	265
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser		270
	275	280
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg		285
	290	295
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly		300
305	310	315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val		320
	325	330
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys		335
	340	345
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly		350
	355	360
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp		365
	370	375
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile		380
385	390	395
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly His Pro Gly Ala Cys		400
	405	410
His Phe Ser Gly Arg Val Glu Met His Val His Pro		415
	420	425

<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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120
gagacaggcc gagtgaccaa gacaaaggac gggcatgagg ttcggacctg caaagtggcg
180
gacaaaacag gcagcatcaa tatctctgtc tgggacgatg ttggcaatct gatccagcct
240
ggggacatta tccggctcac caaagggtac gcttcagttt tcaaagggtg tctgacacta
300

tatactggcc gtgggggtga tctgcagaag attggagaat tctgcatgga ttattctgag
 360
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 420
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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

Tyr	Thr	Val	Leu	Pro	Ala	Gly	Leu	Val	Gly	Cys	Arg	Gly	Ser	Gly	Ser
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Met	Thr	Thr	Glu	Thr	Phe	Val	Lys	Gly	Ile	Lys	Pro	Gly	Leu	Lys	Asn
			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55				60					
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70				75					80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85				90						95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
					135						140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165				170					175		
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
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Leu															

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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540
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1620

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 1860
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 1920
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 1980
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 ggc
 2103

<210> 2654
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 2654
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 Ser Glu Val Asn Phe Leu Arg Phe Glu Cys Cys Phe Lys Thr Leu Ser
 20 25 30
 Ser Asp Ser Lys Cys Leu Leu Leu Leu Gly Ala Val Ala His Ala Cys
 35 40 45
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly
 50 55 60
 Asp Arg Asp Tyr Pro Gly
 65 70

<210> 2655
 <211> 1752
 <212> DNA
 <213> Homo sapiens

<400> 2655
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 120
 tcttctttgt gattgctttt ttagagacgg atttttttcc agatttgatg ttcttggtt
 180
 ttgctttttt tttgatgatc aataacttat tctggatctc aggtttgtaa gacttgaatg
 240
 caagagaatg aagaccttca cgctttctct gtaagttttc attcaaaaca tctttcaatt
 300
 tctttttttt cttttttctt ttttttgccc tcattttagt tagtttgagt ttcttggtgc
 360

tctgtagtga ctgctctaata agaatatccc ttacaacttt gtggcagtta atttctggat
420
gatcactgtg acttccattt acatgtattt ggcaagattt tagagtattt tcttttaatg
480
gactgggttc aatctttatt ctggaagctt caccgtattt ttcttgattt tctataaacc
540
ttatttcacc tggactgaga ggctctccaa agccagtaac ttccccctgga ctccttggtt
600
tctctaaatt ttctttacaa caatcagttt ttttaatttc acaaggcctg cgaattctaa
660
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720
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780
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cataagcagt ctccaaataa tcataacgaa gaataactgc cctgcattca tggataggct
1020
gtccaagtac agcatcttga acttccttat gtgtatcata cacaaagtca caaagacctt
1080
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1140
taacttctcc aagaacttta aaaaactgag gacacaaccc cagtttttca gcacagttat
1200
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1260
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1320
gacttaatag agaagtcatt attttcgata gaaaagcatt aactgaggc atcagaagac
1380
aacgttccaa ttcgtaaaag actatttctg gcaaatttag aatttgctga gctaaacaaa
1440
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1500
ctagaagttt tctttcccat tcttctattt ccttttgact agcttcttct gcttcttttc
1560
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1620
ccataaaatg ataaatttta agtatattta tctttagtca aaaaggcaat caactgtcct
1680
agttttattt atttatttat ttgagacaga gtctcgctct gtccccaggt ctgtagtgca
1740
gtgatgcaat ct
1752

<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656
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Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
35 40 45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
50 55 60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65 70 75 80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
85 90 95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100 105 110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115 120 125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130 135 140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145 150 155 160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165 170 175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180 185 190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195 200 205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210 215 220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225 230 235 240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245 250 255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260 265 270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275 280 285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290 295 300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305 310 315 320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325 330 335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340 345 350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355 360 365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370 375 380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385 390 395 400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405 410 415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435				440						445				
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450				455						460				
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465					470					475					480
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
			485						490						

<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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gtcctgttgt ctaagggcca aggggcagta gcccctctc caggggccct gagcacagag
180
gcgtcagatc agagttgccca tcttcaactt gatatgcccc ccacatccca gcagctctgt
240
gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
360
tatggaaaaca cccacacgtg tgcagatcgc tgcaatgaaa gggtcctgca tggggttggg
420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggattcc ccgtggaatg aggttagaaa aggaagggca agagtggacg
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
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660
ccagaggggtg gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
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780
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840
ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtcct
900
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972

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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
      20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagagggtgg aggccctccc gagggccggt cgcgagaacc tgccacagcc acagatgcca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
360
gtcaactatg acttcggtcc catccacatg cccctggagc acaacctgcc catgcacttt
420
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480
cgtttgggtt aggagtgtgg atggagaacc ctcccccaag gctggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggt tttcttccca cccctttcct agaagggtta
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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<460> 2661
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120
gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg
180
aatcacccgat ctcttatact cctggatgaa tgcagtaagg tggctcctaga taatatccat
240
gggtgtcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat
300
aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag
360
ttcagaaaag ttctttttat cctcatttta tttgaaaacc ttggctttcg acctgttggt
420
ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac
480
attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa
540
gaacagttcg tggaagttat ggctagtgtc ctgactgggt atcttcacac tatttcttct
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660
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720
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780
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840
gcaaaggtgg cagaggtgtc gagcagcctt ctgggaggtg aaggacactt ctcaaaggat
900
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960
caagtgttac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
1020

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 1080
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 1140
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca
 1200
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 1260
 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc
 1320
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 1380
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

Leu Val Asp Gln Gln Val Trp Lys Ile Glu Asp Val Phe Thr Leu Gln
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 Val Val Met Lys Cys Ile Gly Lys Asp Ala Pro Ile Ala Leu Lys Arg
 20 25 30
 Lys Leu Glu Met Lys Ala Leu Arg Glu Leu Asp Arg Phe Ser Val Leu
 35 40 45
 Asn Ser Gln His Met Phe Glu Val Leu Ala Ala Met Asn His Arg Ser
 50 55 60
 Leu Ile Leu Leu Asp Glu Cys Ser Lys Val Val Leu Asp Asn Ile His
 65 70 75 80
 Gly Cys Pro Leu Arg Ile Met Ile Asn Ile Leu Gln Ser Cys Lys Asp
 85 90 95
 Leu Gln Tyr His Asn Leu Asp Leu Phe Lys Gly Leu Ala Asp Tyr Val
 100 105 110
 Ala Ala Thr Phe Asp Ile Trp Lys Phe Arg Lys Val Leu Phe Ile Leu
 115 120 125
 Ile Leu Phe Glu Asn Leu Gly Phe Arg Pro Val Gly Leu Met Asp Leu
 130 135 140
 Phe Met Lys Arg Ile Val Glu Asp Pro Glu Ser Leu Asn Met Lys Asn
 145 150 155 160
 Ile Leu Ser Ile Leu His Thr Tyr Ser Ser Leu Asn His Val Tyr Lys
 165 170 175
 Cys Gln Asn Lys Glu Gln Phe Val Glu Val Met Ala Ser Ala Leu Thr
 180 185 190
 Gly Tyr Leu His Thr Ile Ser Ser Glu Asn Leu Leu Asp Ala Val Tyr
 195 200 205
 Ser Phe Cys Leu Met Asn Tyr Phe Pro Leu Ala Pro Phe Asn Gln Leu
 210 215 220
 Leu Gln Lys Asp Ile Ile Ser Glu Leu Leu Thr Ser Asp Asp Met Lys
 225 230 235 240
 Asn Ala Tyr Lys Leu His Thr Leu Asp Thr Cys Leu Lys Leu Asp Asp
 245 250 255
 Thr Val Tyr Leu Arg Asp Ile Ala Leu Ser Leu Pro Gln Leu Pro Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275						280					285			
Ser	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro	
	290					295				300					
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305				310					315					320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325						330				335		
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
		340						345				350			
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355					360						365			
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370					375					380				
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385				390					395					400	
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405						410					415	

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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180
gtggaccccc tggatcccag ctttgtggct gccgtcatca ccatcacctt caatccgctc
240
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300
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360
tcgcaactgt tcacgcaggc catgctgagc cagcccagga tggagagcct ggacaccccc
420
gaggcctaca gctggggcct cgcgctcctg ggactgggag tcgtgctcgt gctctccagc
480
ttctttgcac tgggggttcgc tggaaacttc ctaggtgatt acttcgggat cctcaaggag
540
gcgagagtga ccgtgttccc cttcaacatc ctggacaacc ccatgtactg gggaagcaca
600
gccaaactacc tgggctgggc catcatgcac gccagcccca cgggcctgct cctgacgggt
660
ctggtggccc tcacctacat aatggctctc ctatacgaag agcccttcac cgctgagatc
720
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780
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840

tgccctgctgc tcagggcctc ccccggcgtg ggctgcccca gtgccttgga acctgctgcc
 900
 ttggggaccc tggacgtgcc gacatatggc cattgagctc caaccacac attcccatc
 960
 accaataaag gcaccctgac cccaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1020
 aaaa
 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
 165 170 175
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
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<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 2665
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 120
 gcgccaatgc gaagcggttc agtcgcttga ctcacctgag gctctccaag gataccttca
 180

atgcctgcac tgtaaggag ctgctttcc cgggtgctgg cgagaacgga agccttcctt
 240
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 300
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 360
 caggctgtgg aagctttcaa gacagccaag gagcccatag tgggtgcaggt gttgagaaga
 420
 acaccaagga ccaaaatgtt cagcctcca tcagagtctc agctggtgga cacgggaacc
 480
 caaacgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
 cccgtgctgg atccctatct cttgccagag gagcatccct cagcccatga atactacgat
 600
 ccaaatgact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
 660
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 720

<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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 20 25 30
 Asp Gln Ala Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val
 35 40 45
 Gln Val Leu Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro Pro Ser
 50 55 60
 Glu Ser Gln Leu Val Asp Thr Gly Thr Gln Thr Asp Ile Thr Phe Glu
 65 70 75 80
 His Ile Met Ala Leu Thr Lys Met Ser Ser Pro Ser Pro Pro Val Leu
 85 90 95
 Asp Pro Tyr Leu Leu Pro Glu Glu His Pro Ser Ala His Glu Tyr Tyr
 100 105 110
 Asp Pro Asn Asp Tyr Ile Gly Asp Ile His Gln Glu Met Asp Arg Glu
 115 120 125
 Glu Leu Glu Leu Glu Glu Val Asp Leu Tyr Arg Met Asn Ser Gln Asp
 130 135 140
 Lys Leu Gly Leu Thr Val Cys Tyr Arg
 145 150

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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gccagagacg cggaacaatt gagcaagaac aaggggaacc ctttttctgt ttgtccccga
 120
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac
 180
 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc
 240
 gtgacactgg tgatcgcata catcatgacc gtcactgact ttggctggg
 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35					40					45		
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
			50					55				60			
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70					75				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
				85					90					95	

<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 180
 cggccccgcc gagagccgga ggcaatggat gaacagagcg tggagagcat tgctgagggt
 240
 ttccgatgtt tcatttgtat ggagaaattg cgggatgcac gcctgtgtcc tcattgctcc
 300
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<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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4080
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4620

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 4740
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 4860
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 4920
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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
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Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
		20					25						30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
	35					40					45				
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55				60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65				70					75					80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
		85						90					95		
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
		100						105					110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115					120					125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130					135					140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
145				150					155					160	
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
		165						170					175		
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
	180						185						190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195						200					205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215					220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225				230					235					240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
		245						250					255		
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

260 265 270
 Lys Arg Pro Gly Thr Ile Arg Lys Ala Gln Asn Leu Leu Lys Gln Tyr
 275 280 285
 Ser Gln His Gly Leu Asp Gly Lys Lys Gly Gly Ser Asn Leu Ile Pro
 290 295 300
 Leu Glu Gly Arg Asp Asp Met Leu Asp Val Glu Thr Asp Ala Tyr Ile
 305 310 315 320
 His Cys Val Ser Ala Phe Val Lys Leu Ala Gln Ser Glu Tyr Gln Leu
 325 330 335
 Leu Ala Asp Ile Ile Pro Glu His His Gln Lys Lys Thr Phe Asp Ser
 340 345 350
 Leu Ile Gln Asp Ala Leu Asp Gly Leu Met Leu Glu Gly Glu Asn Ile
 355 360 365
 Val Ser Ala Ala Arg Lys Ala Ile Val Arg His Asp Phe Ser Thr Val
 370 375 380
 Leu Thr Val Phe Pro Ile Leu Arg His Leu Lys Gln Thr Lys Pro Glu
 385 390 395 400
 Phe Asp Gln Val Leu Gln Gly Thr Ala Ala Ser Thr Lys Asn Lys Leu
 405 410 415
 Pro Gly Leu Ile Thr Ser Met Glu Thr Ile Gly Ala Lys Ala Leu Glu
 420 425 430
 Asp Phe Ala Asp Asn Ile Lys Asn Asp Pro Asp Lys Glu Tyr Asn Met
 435 440 445
 Pro Lys Asp Gly Thr Val His Glu Leu Thr Ser Asn Ala Ile Leu Phe
 450 455 460
 Leu Gln Gln Leu Leu Asp Phe Gln Glu Thr Ala Gly Ala Met Leu Ala
 465 470 475 480
 Ser Gln Glu Thr Ser Ser Ser Ala Thr Ser Tyr Ser Ser Glu Phe Ser
 485 490 495
 Lys Arg Leu Leu Ser Thr Tyr Ile Cys Lys Val Leu Gly Asn Leu Gln
 500 505 510
 Leu Asn Leu Leu Ser Lys Ser Lys Val Tyr Glu Asp Pro Ala Leu Ser
 515 520 525
 Ala Ile Phe Leu His Asn Asn Tyr Asn Tyr Ile Leu Lys Ser Leu Glu
 530 535 540
 Lys Ser Glu Leu Ile Gln Leu Val Ala Val Thr Gln Lys Thr Ala Glu
 545 550 555 560
 Arg Ser Tyr Arg Glu His Ile Glu Gln Gln Ile Gln Thr Tyr Gln Arg
 565 570 575
 Ser Trp Leu Lys Val Thr Asp Tyr Ile Ala Glu Lys Asn Leu Pro Val
 580 585 590
 Phe Gln Pro Gly Val Lys Leu Arg Asp Lys Glu Arg Gln Ile Ile Lys
 595 600 605
 Glu Arg Phe Lys Gly Phe Asn Asp Gly Leu Glu Glu Leu Cys Lys Ile
 610 615 620
 Gln Lys Ala Trp Ala Ile Pro Asp Thr Glu Gln Arg Asp Arg Ile Arg
 625 630 635 640
 Gln Ala Gln Lys Thr Ile Val Lys Glu Thr Tyr Gly Ala Phe Leu Gln
 645 650 655
 Lys Phe Gly Ser Val Pro Phe Thr Lys Asn Pro Glu Lys Tyr Ile Lys
 660 665 670
 Tyr Gly Val Glu Gln Val Gly Asp Met Ile Asp Arg Leu Phe Asp Thr
 675 680 685
 Ser Ala

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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 tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca
 120
 gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt
 180
 cgggcagtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgt
 240
 cctcctccta ctccagtga aaaaggtggc cctattgaat ccaattgaaa accccgacct
 300
 gaagctggcc atcgtcatgc tgatcgctcc cttctttgtc aacgctttga tgttttgggt
 360
 agtggacaat ttcctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc
 420
 caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
 480
 gtctgagtct gagatcctga tctcagcgga tgatgagatg gaggagtccg acgtggagga
 540
 ggacctccgc agactgaccc ccctcaagcc tgtgaagaaa aagaagcacc gctttgggct
 600
 acccgatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctgggtgtg
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 711

<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
 1 5 10 15
 Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
 20 25 30
 Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
 35 40 45
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
 50 55 60
 Lys Lys Val Ala Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
 65 70 75 80
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
 85 90 95
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
 100 105 110
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

      115              120              125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130              135              140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
145              150              155              160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165              170              175
Gly Leu Pro Val
      180

```

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

```

ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag
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ggccgctggt gagggcgcc cgggccgcgg tggggcacgg cgcggtgcc ggggtgtgca
120
gagccccctt tgcagggcag gagctgggga gtggttagga catcagtcct tcaggtaggg
180
ggagtgcgca catcaggtcc atatgtgtcc caggagcatc cctagctggc cgccctgagt
240
gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac ccctccctcc
300
gctggggcct tcagcctcct gagggagaa ttctcccatg cgccgagccc agacatgagc
360
gctgcgtccc tctgcgcaat ggagcagctc atgatggccc aggcccagga atgtgtgttt
420
gagggcctct caccacctgc ctccatggcc ccccaagact gcctggccca gctgcgcctg
480
gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggcgc
540
agctggggtc agagcccagg tccaggcatg cgtgagctct cccacctcct tccttgtgtg
600
tcagccccga gccagctgtt gtcctgtctc ctgggggggc tggtcaggaa cctggggacc
660
cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
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ctgggatggg ggtcg
735

```

<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

```

Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
 1              5              10              15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
      20              25              30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```

```

      35              40              45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
  50              55              60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
  65              70              75              80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85              90              95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100              105              110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115              120              125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130              135              140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
  145              150              155              160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165              170

```

<210> 2679
 <211> 560
 <212> DNA
 <213> Homo sapiens

```

<400> 2679
agccgccccca cctcctgttc cattataatc ttattttggt tatgttgata caacacaatc
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120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgctcaccg cacaggaggg ctgacccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctgggcccag ttgcgcccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggcctgggcg ggggcatcca actgcccacc
540
cgtcagactg agggacgcgt
560

```

<210> 2680
 <211> 133
 <212> PRT
 <213> Homo sapiens

```

<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
  1              5              10              15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

```

gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggaattctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccggagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc tttctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacggt ccagatttgt tttcagtact aatggttcat ctcttttttt ctgttcatcc
480
attttccttt tcctgttttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctt cttgtaactt ttcttctctc agcttttctc agctt
585

```

<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```



```

      35      40      45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
  50      55      60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
  65      70      75      80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85      90      95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100      105      110
Met Val Met Lys
      115

```

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

```

nacgcgttac actgactcca aaactctcct tggtaggccta ggtgaaacct catggccaac
  60
atcacctgga tggccaacca cactggaagg ttggatttca tctcatggg actcttcaga
  120
cgatccaaac atccagctct acttagtggtg gtcattcttg tggttttcct gatggcggtg
  180
tctgaaaatg ctgtectgat ccttctgata cactgtgaca cctacctcca caccctcatg
  240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
  300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtgggatg
  360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
  420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
  480
gtctgtcttt tcttgga
  498

```

<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1      5      10      15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20      25      30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35      40      45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50      55      60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
      65      70      75      80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

```

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtaag
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cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgc ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
360
gtgggctccg tagtagaaag cgccttcggg a
391

```

<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

```

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

```

130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

nagtgcaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc
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 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtcgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
 300
 cctttggtct tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate
 360
 cagtatgtaa aggataaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5				10					15		
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
		20					25						30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
		35				40					45				
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50				55					60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70				75						80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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 60
 gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc
 120
 tcaaaactct ggctcaaga aatcctctcg gttcagcctc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctggtga gaaaaatcct gttcaacctg
 360
 ggttggtata tcgtctttga aaaacaatga ctataaaaagc tacaggaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa
 480
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc
 540
 gaaacaagcc atcacgccag
 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1				5				10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20					25					30			
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
	35					40					45				
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
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<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 240
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<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

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Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser
35 40 45
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met
50 55 60
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr
65 70 75 80
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn
85 90 95
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr
100 105 110
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala
115 120 125
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu
130 135 140
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg
145 150 155 160
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro
165 170 175
Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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180
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420

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<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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		20						25					30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
		35					40					45			
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50				55						60				
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65					70					75					80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85					90					95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
			100					105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
		115					120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130				135						140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145					150						155				160
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165						170					175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
			180					185					190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
		195					200					205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210						215					220			
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230						235					240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
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Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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420
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 2160
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35				40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
	50				55				60						
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65				70				75					80		
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85				90						95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100				105					110			
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115				120						125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130		135		140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu				
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Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp				
	165		170	175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
	180		185	190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
	195		200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
	210		215	220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
225		230		235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
	245		250	255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
	260		265	270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
	275		280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
	290		295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
305		310		315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
	325		330	335
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
	340		345	350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe				
	355		360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370		375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly				
385		390		395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405		410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
	420		425	430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435		440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450		455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
465		470		475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser				
	485		490	495
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
	500		505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515		520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
	530		535	540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
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Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe				

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<210> 2697
<211> 2468
<212> DNA
<213> Homo sapiens
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1140
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<210> 2698

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
 50 55 60
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
 85 90 95
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
 100 105 110
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
 115 120 125
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
 130 135 140
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
 145 150 155 160
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
 165 170 175
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
 180 185 190
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 195 200 205
 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
 210 215 220
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
 225 230 235 240
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
 245 250 255
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
 260 265 270
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
 275 280 285
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35				40						45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70				75						80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105					110		
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Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala
      130              135              140
Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro
      145              150              155              160
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<210> 2701

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2701

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<210> 2702

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2702

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35          40          45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
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<210> 2705
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 <212> DNA
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<210> 2706
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 2706
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 35 40 45
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
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<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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 Ile Pro Ala Ile Trp Phe Arg Tyr Asp Leu Ser Pro Ile Thr Val Lys
 275 280 285
 Tyr Thr Glu Arg Arg Gln Pro Leu Tyr Arg Phe Ile Thr Thr Ile Cys
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<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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<211> 242

<212> PRT

<213> Homo sapiens

<400> 2710

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Tyr	Gly	Ile	Val	Thr	Met	Ser	Ser	Ser	Thr	Glu	Val	Ser	Arg	Cys	Ile
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<213> Homo sapiens

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1951

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<212> PRT

<213> Homo sapiens

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<211> 508

<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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120

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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
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His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
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Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
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Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85				90						95		
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
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Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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Met	Val	His	Arg												
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<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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 120
 taaatctggg atatttaaatt gtgctgtaaa tagatttgta tattttcttt tttgagtact
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 atgatagggtg aaatgggatg actataaaaa ggatttggtt ctttttgtct cctggaatga
 240
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg
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 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
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 420
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 480
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 660
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 780
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 960
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<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

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 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

										20			25			30		
Glu	Leu	Asp	Ile	Val	Val	Thr	Ser	Asn	Lys	Glu	Val	Lys	Val	Ala	Ala			
			35			40						45						
Val	Arg	Asp	Ala	Phe	Gln	Glu	Val	Phe	Gly	Leu	Ala	Val	Val	Val	Gly			
			50			55						60						
Glu	Ala	Gly	Gln	Ser	Asn	Ile	Ala	Pro	Gln	Pro	Val	Gly	Tyr	Ala	Ala			
			65			70						75			80			
Gly	Leu	Lys	Gly	Ala	Gln	Glu	Arg	Ile	Asp	Ser	Leu	Arg	Arg	Thr	Gly			
			85			90						95						
Val	Ile	His	Glu	Lys	Gln	Thr	Ala	Val	Ser	Val	Glu	Asn	Phe	Ile	Ala			
			100			105						110						
Glu	Leu	Leu	Pro	Asp	Lys	Trp	Phe	Asp	Ile	Gly	Cys	Leu	Val	Val	Glu			
			115			120						125						
Asp	Pro	Val	His	Gly	Ile	His	Leu	Glu	Thr	Phe	Thr	Gln	Ala	Thr	Pro			
			130			135						140						
Val	Pro	Leu	Glu	Phe	Val	Gln	Gln	Ala	Gln	Ser	Leu	Thr	Pro	Gln	Asp			
			145			150						155			160			
Tyr	Asn	Leu	Arg	Trp	Ser	Gly	Leu	Leu	Val	Thr	Val	Gly	Glu	Val	Leu			
			165			170						175						
Glu	Lys	Ser	Leu	Leu	Asn	Val	Ser	Arg	Thr	Asp	Trp	His	Met	Ala	Phe			
			180			185						190						
Thr	Gly	Met	Ser	Arg	Arg	Gln	Met	Ile	Tyr	Ser	Ala	Ala	Arg	Ala	Ile			
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Ala	Gly	Met	Tyr	Lys	Gln	Arg	Leu	Pro	Pro	Arg	Thr	Val						
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<210> 2729
<211> 393
<212> DNA
<213> Homo sapiens
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240
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ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
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<210> 2730
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<212> PRT
<213> Homo sapiens
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<400> 2730
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      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
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<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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180
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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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		20						25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
		35					40					45			
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
		50				55					60				
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65					70				75					80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
				85					90					95	
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100					105					110		
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
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Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
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Arg Asp Leu Ile Gly Cys Leu Gln Lys Leu Leu Phe Gly Lys Val Ala
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Lys Asp Ser Ser Arg Met Leu Gln Pro Ser Ser Ser Pro Leu Trp Gly
      260      265      270
Lys Leu Arg Val Asp Ile Lys Ala Tyr Leu Gly Ser Ala Ile Gln Leu
      275      280      285
Val Ser Cys Leu Ser Glu Thr Thr Val Leu Ala Ala Val Leu Arg His
      290      295      300
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Met Leu Leu Lys Arg Met Val Val Val Trp Ser Thr Gly Glu Glu Ser
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Leu Arg Val Leu Ala Phe Leu Val Leu Ser Arg Val Cys Arg His Lys
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Lys Asp Thr Phe Leu Gly Pro Val Leu Lys Gln Met Tyr Ile Thr Tyr
      355      360      365
Val Arg Asn Cys Lys Phe Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser
      370      375      380
Phe Met Gln Trp Thr Leu Thr Glu Leu Leu Ala Leu Glu Pro Gly Val
      385      390      395      400
Ala Tyr Gln His Ala Phe Leu Tyr Ile Arg Gln Leu Ala Ile His Leu
      405      410      415
Arg Asn Ala Met Thr Thr Arg Lys Lys Glu Thr Tyr Gln Ser Val Tyr
      420      425      430
Asn Trp Gln Tyr Val His Cys Leu Phe Leu Trp Cys Arg Val Leu Ser
      435      440      445
Thr Ala Gly Pro Ser Glu Ala Leu Gln Pro Leu Val Tyr Pro Leu Ala
      450      455      460
Gln Val Ile Ile Gly Cys Ile Lys Leu Ile Pro Thr Ala Arg Phe Tyr
      465      470      475      480
Pro Leu Arg Met His Cys Ile Arg Ala Leu Thr Leu Leu Ser Gly Ser
      485      490      495
Ser Gly Ala Phe Ile Pro Val Leu Pro Phe Ile Leu Glu Met Phe Gln
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Gln Val Asp Phe Asn Arg Lys Pro Gly Arg Met Ser Ser Lys Pro Ile
      515      520      525
Asn Phe Ser Val Ile Leu Lys Leu Ser Asn Val Asn Leu Gln Glu Lys
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Ala Tyr Arg Asp Gly Leu Val Glu Gln Leu Tyr Asp Leu Thr Leu Glu
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Tyr Leu His Ser Gln Ala His Cys Ile Gly Phe Pro Glu Leu Val Leu
      565      570      575
Pro Val Val Leu Gln Leu Lys Ser Phe Leu Arg Glu Cys Lys Val Ala
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      595      600      605
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Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu		655
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Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys		670
	675	680
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe		685
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Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg		700
705	710	715
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu		720
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Glu Asp Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu		735
	740	745
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly		750
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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		20						25				30			
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Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
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Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
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Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
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Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
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<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50 55 60
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65 70 75 80
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
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 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
 100 105 110
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
 115 120 125
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
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 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
 145 150 155 160
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
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 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
 180 185 190
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
 195 200 205
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
 210 215 220
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
 225 230 235 240
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
 245 250 255
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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300
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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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 Lys Phe Ser Cys Cys Gly Gly Ile Ser Tyr Lys Asp Trp Ser Gln Asn
 35 40 45
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser
 50 55 60
 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn
 65 70 75 80
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser
 85 90 95
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile
 100 105 110
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile
 115 120 125
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
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 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

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<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
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<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
	50					55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65				70					75					80	
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Pro Asp

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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		20					25				30				
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35				40					45				
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	50					55				60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65				70					75				80		
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90					95		
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

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130	135	140
Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys		
145	150	155
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala		
165	170	175
Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile		
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<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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1020

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<213> Homo sapiens

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4680
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<210> 2756

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2756

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20      25      30
Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
35      40      45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
50      55      60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65      70      75      80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
85      90      95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
100     105     110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
115     120     125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
130     135     140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
145     150     155     160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
165     170     175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
180     185     190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
195     200     205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
210     215     220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
225     230     235     240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
245     250     255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
260     265     270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
275     280     285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
290     295     300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
305     310     315     320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
325     330     335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
340     345     350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
355     360     365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
370     375     380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
385     390     395     400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
405     410     415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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420 425 430
 Phe Ser Leu Gly Pro Ser Ala Leu Gln Arg Gly Glu Ser Ser Met Arg
 435 440 445
 Ser Glu Lys Pro Ser Thr Ala His His Arg Pro Leu Arg Ser Ile Ala
 450 455 460
 Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
 465 470 475 480
 Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
 485 490 495
 Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
 500 505 510
 Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
 515 520 525
 Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
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 Arg Thr Ile Ser Glu Ile
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<210> 2757
 <211> 449
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 2758
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2758
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 Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
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 Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
 35 40 45
 Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

50 55 60
 Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr
 65 70 75 80
 Leu Cys

<210> 2759
 <211> 688
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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 300
 gccagttttt ccaaatagacc tgtaccctac ccagtaccct gctccccctt tcccataatt
 360
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 420
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 480
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 540
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 688

<210> 2760
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 2760
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 20 25 30
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg
 35 40 45
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro
 50 55 60
 Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr
 65 70 75 80
 Thr Ile Leu Glu

<210> 2761
 <211> 922
 <212> DNA
 <213> Homo sapiens

<400> 2761
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 120
 ccataactg agggcaataa agagccagat aagacctggg tgaaaaagg agagcccctc
 180
 ccggtaaaac tgaactcttc tacagaagca aatgtgatta aagaggctct agactcctct
 240
 ttggaatcta ctctggacaa cagctgtcaa ggtgcacaaa tggataataa atctgaagtt
 300
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 360
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 420
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 720
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<210> 2762
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2762
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 20 25 30
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 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

50 55 60
 Asn Ser Ser Thr Glu Ala Asn Val Ile Lys Glu Ala Leu Asp Ser Ser
 65 70 75 80
 Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn
 85 90 95
 Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile
 100 105 110
 Glu Asp Ile Leu Pro Ser Lys Glu Lys Ser Lys Thr Pro Pro Met
 115 120 125
 Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr
 130 135 140
 His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro
 145 150 155 160
 Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr
 165 170 175
 Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu
 180 185 190
 Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn
 195 200 205
 Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu
 210 215 220
 Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp
 225 230 235 240
 Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn
 245 250 255
 Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly
 260 265 270
 Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu
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 Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu
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 Val Ile Lys
 305

<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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 120
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 180
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 300
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 360
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 420

gaaatcctcc tggattcaat gacaacacat caatggccgg gcacaggggt ggattccttt
480
tatgaaatca ccttataatc tctcatcatc ccaggacagt gccttttggg actgcatgaa
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960
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2040

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
		50				55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85						90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100						105					110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
		130				135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145					150					155					160
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
		180						185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
		195					200						205		
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
		210				215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225				230						235					240
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
		260					265						270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
		275					280						285		
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
		290				295					300				
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
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<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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120
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<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
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Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60	
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro				
65	70	75	80		
Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro					
	85	90	95		
Glu Ala Gly Ser					
100					

<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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240
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300
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540
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600
gcgtcctctg acagctcgcc cgtggcttct ccttccagtc ccaaagaaa tttcttcagc
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720
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1080
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1202

<210> 2768

<211> 282

<212> PRT

<213> Homo sapiens

<400> 2768

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      20      25      30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
      35      40      45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
      50      55      60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65      70      75      80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
      85      90      95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
      100     105     110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
      115     120     125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
      130     135     140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145     150     155     160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
      165     170     175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
      180     185     190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
      195     200     205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
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Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225     230     235     240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
      245     250     255
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<210> 2769

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 2769

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<212> PRT

<213> Homo sapiens

<400> 2770

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 Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
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<212> DNA

<213> Homo sapiens

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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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<400> 2774

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<210> 2775

<211> 3139

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Trp	Thr	His	Pro	Ile	Thr	Asp	Gln	Leu	Arg	Ala	Met	Asn	Lys	Ala	Ala
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His	Gln	Glu	Ser	Thr	Glu	His	Val	Leu	Ser	Gly	Gly	Val	Val	Val	Ser
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<212> DNA

<213> Homo sapiens

<400> 2777

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Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser
	100						105					110			
Arg	Lys	Tyr	Ser	Gly	Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln
	115					120					125				
Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr
	130				135					140					
Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser
145			150					155					160		
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp
		165					170					175			
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr

2025

610	615	620
Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His		
625	630	635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
	690	700
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		
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		720

<210> 2781

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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120
gacctcctgt cagatcttga tgagttttct tccagattca agaacctggc ccaccagcac
180
cagtcgatgt tccccaccct ggaaatagac attgaaggcc aactcaaaag gctcaagggc
240
tttctgagc ggatcagacc catggtccga gatggtgttt actttatgta tgaggcactc
300
cacggccccc ccaagaagat cctggtggag ggtgccaacg ccgccctcct cgacattgac
360
ttcgggacct acccctttgt gacttcatcc aactgcaccg tgggcgggtgt gtgcacgggc
420
ctgggcatcc ccccgagaa cataggtgac gtgtatggcg tggtgaaagc ctataccaca
480
cgtgtgggca tccgggcctt cccaccgag cagatcaacg agattggagg cctgctgcag
540
accgcggcc acgagtgggg agtgaccaca ggcaggaaga ggcgctgcgg ctggctcgac
600
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660
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720
aaaaggattc cctatttccc agctaaccag gagatgcttc agaaggtcga agttgagtat
780
gaaacgctgc ctgggtggaa agcagacacc acaggcgcca ggaggtggga ggacctgccc
840
ccacaggccc agaactacat ccgctttgtg gagaatcacg tgggagtcgc agtcaaatgg
900
gttggtgttg gcaagtcaag agagtcgatg atccagctgt ttagtcgca gactgagctg
960
atcccaacag gccctggcag cgtctggact tgtgtaaaca gcagcagtca cgttcctcgg
1020

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ccgccacaac caacaccaaa gcaggaaaac cattttctgt acttttatat ttctgttcaa
 1080
 cctgttggtt tctacaatga ttttaaacat tggaaagcca gccttgtgta tatttttaaa
 1140
 aattatattc aaaatgagcc aaagtgtcga gagaccttct atgacacatt agtgtcacat
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 1260
 aaaaaaaaa
 1268

<210> 2782

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

Val	Asp	Gly	Leu	Gln	Glu	Val	Gln	Arg	Gln	Ala	Gln	Glu	Gly	Lys	Asn
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Ile	Gly	Thr	Thr	Lys	Lys	Gly	Ile	Gly	Pro	Thr	Tyr	Ser	Ser	Lys	Ala
			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
			35				40					45			
Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
	50					55				60					
Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
65					70				75					80	
Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
			85					90						95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
			100					105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
			115				120					125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
			130				135				140				
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
145					150					155				160	
Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
			165					170						175	
Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
			180					185					190		
Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
			195				200					205			
Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
			210			215					220				
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
225					230					235				240	
Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
			245					250						255	
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
			260					265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg	
			275				280				285				
Phe	Val	Glu	Asn	His	Val	Gly	Val	Ala	Val	Lys	Trp	Val	Gly	Val	Gly

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<210> 2783
<211> 2376
<212> DNA
<213> Homo sapiens
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2028

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 1380
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 1440
 ctgttcacac tttgactgga tggagatgca ttacaaaac agactggaga aggacttaat
 1500
 actcagatgg attggaacta tcatggtcac tgctcctctc ccctccccac aaaaggaaaa
 1560
 aaaagctgga tttgattttt tttttctggt cactcgagca catctaagat caccattag
 1620
 gttttatctg ggacctgcag tttggctttg ggattgatca tcttggtgat tttattcctg
 1680
 acgattccct tgetgcctac ccttttctct cctctggttc tcaacctcaa cgagttcaaa
 1740
 tcagttgtcc ttttagctc ccgtggaact gttttgtatc tgctcttta ctagtctacc
 1800
 ttagtgccat ccaccagctt tactctctga cacacacacg cacacacaca cacacaattt
 1860
 taacttgttt tttgtacat aatgtacata ctgtcaattt tttattaaaa gaaatagtct
 1920
 ttgatgtgct agcataactg ctctagcttc ttgtgtacca tagtactgtg gcttcagatt
 1980
 tagtacctat gaacagatgt acaagacatt tattacactt tttaccaaag ggagttacca
 2040
 ttgtagtact tttgtgtaaa acttgtcttc ccctttgccc ccaacttttt tttttttttt
 2100
 ttgtaaaata ataaagcttg gttcttactt aaggaaaaaa ctctcaaccc acgtcccttg
 2160
 tcctcaccag aaaatactgt gaagcagga ttttgacttc agttccttat ccagggtaga
 2220
 aacaggattt tgcttaaaat acttgttact tgtcccaaat caaaatattc caaaatctta
 2280
 gaatacttaa gtcttttagt acgtgttttt ttcccttggt caaataatct gaaaatattt
 2340
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 2376

<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

Ala Glu Arg Gln Ile Glu Glu Glu Asn Arg Glu Arg Glu Trp Glu Arg
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 Glu Val Leu Gly Ile Lys Arg Asp Lys Ser Asp Ser Pro Ala Ile Gln
 20 25 30
 Leu Arg Leu Lys Glu Pro Met Asp Val Asp Val Glu Asp Tyr Tyr Pro
 35 40 45
 Ala Phe Leu Asp Met Val Arg Ser Leu Leu Asp Gly Asn Ile Asp Ser
 50 55 60
 Ser Gln Tyr Glu Asp Ser Leu Arg Glu Met Phe Thr Ile His Ala Tyr
 65 70 75 80
 Ile Ala Phe Thr Met Asp Lys Leu Ile Gln Ser Ile Val Arg Gln Leu

	85		90		95
Gln His Ile Val Ser Asp Glu Ile Cys Val Gln Val Thr Asp Leu Tyr					
	100		105		110
Leu Ala Glu Asn Asn Asn Gly Ala Thr Gly Gly Gln Leu Asn Thr Gln					
	115		120		125
Asn Ser Arg Ser Leu Leu Glu Ser Thr Tyr Gln Arg Lys Ala Glu Gln					
	130		135		140
Leu Met Ser Asp Glu Asn Cys Phe Lys Leu Met Phe Ile Gln Ser Gln					
	145		150		155
Gly Gln Val Gln Leu Thr Ile Glu Leu Leu Asp Thr Glu Glu Glu Asn					
	165		170		175
Ser Asp Asp Pro Val Glu Ala Glu Arg Trp Ser Asp Tyr Val Glu Arg					
	180		185		190
Tyr Met Asn Ser Asp Thr Thr Ser Pro Glu Leu Arg Glu His Leu Ala					
	195		200		205
Gln Lys Pro Val Phe Leu Pro Arg Asn Leu Arg Arg Ile Arg Lys Cys					
	210		215		220
Gln Arg Gly Arg Glu Gln Gln Glu Lys Glu Gly Lys Glu Gly Asn Ser					
	225		230		235
Lys Lys Thr Met Glu Asn Val Asp Ser Leu Asp Lys Leu Glu Cys Arg					
	245		250		255
Phe Lys Leu Asn Ser Tyr Lys Met Val Tyr Val Ile Lys Ser Glu Asp					
	260		265		270
Tyr Met Tyr Arg Arg Thr Ala Leu Leu Arg Ala His Gln Ser His Glu					
	275		280		285
Arg Val Ser Lys Arg Leu His Gln Arg Phe Gln Ala Trp Val Asp Lys					
	290		295		300
Trp Thr Lys Glu His Val Pro Arg Glu Met Ala Ala Glu Thr Ser Lys					
	305		310		315
Trp Leu Met Gly Glu Gly Leu Glu Gly Leu Val Pro Cys Thr Thr Thr					
	325		330		335
Cys Asp Thr Glu Thr Leu His Phe Val Ser Ile Asn Lys Tyr Arg Val					
	340		345		350
Lys Tyr Gly Thr Val Phe Lys Ala Pro					
	355		360		

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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120
tgatgagatc ctcttcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt
180
ccggcgtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgctg gctccaccgt
360

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ggaacacgtg gcccgctgcc cgcagcctgg tgaaggtgaa cctctcgggc tgccacctca
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 480
 acgtgagccc cg
 492

<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser
 20 25 30
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
 115 120 125
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
 130 135 140
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
 145 150 155

<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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 atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc
 120
 acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgcctt
 180
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
 240
 ggtattgatt ctgaagagat cactgatggc cgtgatttct tgccctcagct taccagat
 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
 1           5           10           15
Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
           20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
           35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
           50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
           85           90           95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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gctgctggaa ggagtgcacc aggaggctgc cgggggtccgg gagcccatgc tccagtgcct
120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
180
ccctggactg cagcctctgc acttcttctc tcattgcact gtccactcct gcgggcagag
240
ccaggcgtg ggteacggcc ggccggctcc ccacccacac cccaggggt cctcctgtc
300
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgtgctctgc
360
ctggcgctgg ccagaggtct caggetatgc cgcctaagta cgtcggggcg ggtggctctg
420
cgcagaggct caggggtccg gccacgtga gggagggtcaa ggctgaggtc tcagcggccc
480
tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
 1           5           10           15
Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
           20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
           35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60											
His	Cys	Pro	Leu	Leu	Arg	Ala	Glu	Pro	Gly	Ala	Gly	Ser	Arg	Pro	Ala
65					70					75				80	
Gly	Ser	Pro	Pro	Thr	Pro	Pro	Gly	Leu	Pro	Pro	Val	Pro	Arg	Glu	Arg
			85					90					95		
Gln	Ser	Gln	Lys	Thr	Gln	Ala	Gln	Ala	Ser	Ala	Thr	Pro	Ala	Ala	Cys
		100					105					110			
Leu	Ala	Leu	Ala	Arg	Gly	Leu	Arg	Leu	Cys	Arg	Leu	Ser	Thr	Ser	Gly
	115					120					125				
Arg	Val	Ala	Leu	Arg	Arg	Gly	Ser	Gly	Ser	Arg	Pro	Arg			
	130					135					140				

<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
tcaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aataccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcgtggttg atgtcagcgc atagtaacaa tctgcctcc cctaactct
420
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480
ggtgtggcca gaagaccctt ttcctatag accactatga gccctgaaag atttatgagg
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taatgttcac ttcactctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggaccca gagacctcct
660
cctgaaggac tctacctag accccctggt gatagtggta accaagatga tggctcctcag
720
cagagaccac caaaaccagg aggccatcac cgccatcctc cccacactcc ttttcaaaat
780
cagcaacgac caccacaacg aggacaccgt caactctctc taccgatt tcttctgtc
840
agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tcccaggag
900
caaccactct ggtaatctag aattcagtgg cagaaaataa ataagaagat aacttccttc
960
agaaagccat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaat
1020
attaatagca tgcggaagaa agaatggttt gcatccacat ggagagtgtg ccatttagag
1080

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gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat
 1140
 gcatcttggt ataatatat ctttgctcac atgaatttta cttgttaatt agcctggctg
 1200
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 1260
 gctcactgtc t
 1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

Cys	Ser	Leu	His	Pro	Val	Leu	Leu	Phe	Leu	Asp	Val	Asn	Tyr	Glu	Asp
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Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35				40						45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50					55					60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln	
65				70					75					80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85					90					95		
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105					110		
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
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<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 120
 tgaggcggcg gcgtcactgc caggaaacaa cccaacagt cagcgcgccg gcggccgcgg
 180
 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa
 240
 gaggcgccag aggagccgcc ttctgcctca gaacggcgtg actcggagaa ttggagcgtt
 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
 360
 cagatcttaa gtagtgatat ttctcttttg tctgcccta ttgtaagtgc agatggaaca
 420
 caacaggtta ttctggtaca agttaaccca ggagaagcat ttacaataag aagagaagat
 480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct
 540
 gtgcctccta tctatgtgcc tcctggatat gcccacacag ttattgaaga caatgggtgtt
 600
 cgaagagttg tcgtgggtcc tcaggcacca gagtttcacc ctggtagtca cacagttctc
 660
 caccgttctc cacatctctc tctacctggt ttcattcctg tcccaactat gatgccgcct
 720
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
 780
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 840
 cagcggt
 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
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Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
			35				40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55				60					
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70						75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85					90					95		
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100					105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120						125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
	130					135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 120
 gcctggcagc tgctgggtgt ggaatagttc tggatgccaa tctcctccag gctcctgcgg
 180
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 240

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 780
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 1020
 gt
 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
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 20 25 30
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 120

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 180
 ggcttctcca ccgtgcttgg catcctactc ttcctggccg aggtgggtgct gctctgctgg
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 300
 cacacgggct ggcagggcgc cctgggtgtcc accatcatca tggtgcccgt gggcctcatc
 360
 ttcgtggtct tcaccatcca cttctaccgc tcctgggtgc gccacaaaac ggagcgccac
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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

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		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
			100					105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120						125			
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
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<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 180
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720
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1860

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 2700
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 2760
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20				25						30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55			60							
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70				75						80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90						95	
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

100 105 110
 Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val
 115 120 125
 Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro
 130 135 140
 Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val
 145 150 155 160
 Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala
 165 170 175
 Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala
 180 185 190
 Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr
 195 200 205
 Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr
 210 215 220
 Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr
 225 230 235 240
 Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln
 245 250 255
 Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro
 260 265 270
 Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu
 275 280 285
 Asn Ala Gly Gln Lys Arg
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<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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 240
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 300
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 360
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 420
 cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt
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 549

<210> 2802

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 2802
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20 25 30
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35 40 45
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50 55 60
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65 70 75 80
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85 90 95
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100 105 110
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115 120 125
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130 135 140
 Lys Arg Lys Gly Val Glu Phe
 145 150

<210> 2803
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2803
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 120
 ccgccagccg tagggtgtgt gctgtccggg ctcacgggga ccctgtctcc gagtcgttcg
 180
 tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccgggccc tgcagcacct
 240
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 300
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 360
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 420
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 459

<210> 2804
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2804

Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro
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 Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
 20 25 30
 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
 35 40 45
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50 55 60
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65 70 75 80
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
 85 90 95
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100 105 110
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
 115 120 125
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
 130 135 140
 Ala Gln Pro Gly Leu Ala Gly Thr Gly
 145 150

<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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 120
 gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
 180
 atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga
 240
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaacctat
 300
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 360
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 420
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 480
 gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag
 540
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 600
 tgtacatate tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt
 660
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<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 20 25 30
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 120
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 180
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 480

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 780
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<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40					45			
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50		55		60											
Thr	Asp	Ser	Leu	Val	Ser	Phe	Ser	Ala	Glu	Ile	Leu	Ser	Arg	Thr	Leu
65			70						75						80
Cys	Glu	Pro	Leu	Val	Ala	Ser	Leu	Trp	Met	Lys	Leu	Gly	Asn	Thr	Gly
			85						90					95	
Ala	Met	Arg	Arg	Cys	Val	Lys	Leu	Thr	Val	Ala	Leu	Glu	Thr	Ala	Glu
			100					105					110		
Cys	Glu	Phe	Pro	Pro	His	Leu	Asp	Val	Tyr	Ile	Glu	Asp	Pro	His	Leu
		115					120					125			
Pro	Pro	Ser	Leu	Gly	Leu	Leu	Pro	Gly	Ala	Arg	Val	His	Phe	Ser	Gln
	130				135						140				
Leu	Glu	Lys	Arg	Val	Ser	Arg	Ser	His	Asn	Val	Tyr	Cys	Cys	Phe	Arg
145				150					155						160
Ser	Ser	Thr	Tyr	Val	Gln	Val	Leu	Ser	Phe	Pro	Pro	Glu	Thr	Thr	Ile
			165						170					175	
Ser	Val	Pro	Leu	Pro	His	Ile	Tyr	Leu	Ala	Glu	Leu	Leu	Gln	Gly	Gly
		180						185					190		
Gln	Ser	Pro	Phe	Gln	Ala	Thr	Ala	Ser	Cys	His	Ile	Val	Ser	Val	Phe
	195						200					205			
Ser	Leu	Gln	Leu	Phe	Trp	Val	Cys	Ala	Tyr	Cys	Thr	Ser	Ile	Cys	Arg
	210					215					220				
Gln	Gly	Lys	Cys	Thr	Arg	Leu	Gly	Ser	Thr	Cys	Pro	Thr	Gln	Thr	Ala
225				230					235					240	
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Cys	Pro	Arg	Glu	Trp	Ala	Ser	Leu	Leu	Asp	Phe	Val	Gln	Val	Pro	Gly
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Arg	Val	Val	Leu	Gln	Phe	Ala	Gly	Pro	Gly	Ala	Gln	Leu	Glu	Ser	Ser
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Ala	Arg	Val	Asp	Glu	Pro	Met	Thr	Met	Phe	Leu	Trp	Thr	Leu	Cys	Thr
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			325					330						335	
Lys	Pro	Ser	Lys	Ile	Val	Pro	Leu	Glu	Pro	Pro	Arg	Leu	Gln	Arg	Phe
		340						345					350		
Gln	Cys	Gly	Glu	Leu	Pro	Phe	Leu	Thr	His	Val	Asn	Pro	Arg	Leu	Arg
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Leu	Ser	Cys	Leu	Ser	Ile	Arg	Glu	Ser	Glu	Tyr	Ser	Ser	Ser	Leu	Gly
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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

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 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
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 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

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 20 25 30
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35 40 45
 Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu
 50 55 60
 Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro
 65 70 75 80
 Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala
 85 90 95
 Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His
 100 105 110
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 Leu Gly Ser
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<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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<210> 2814

<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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 35 40 45
 Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50 55 60
 Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
 65 70 75 80
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
 85 90 95
 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
 100 105 110
 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
 115 120 125
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
 130 135 140
 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
 145 150 155 160
 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
 165 170 175
 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
 180 185 190
 Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
 195 200 205
 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
 210 215 220
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
 225 230 235 240
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
 245 250 255
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
 260 265 270
 Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
 275 280 285
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
 290 295 300
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
 305 310 315 320
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
 325 330 335
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
 340 345 350
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
 355 360 365
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
 370 375 380
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
 385 390 395 400
 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
 405 410 415
 Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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<210> 2815

<211> 1421

<212> DNA

<213> Homo sapiens

<400> 2815

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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55					60				
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65				70					75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
			85					90					95		
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
		100					105					110			
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
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Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130				135					140					
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145				150					155					160	
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			165					170					175		
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180					185						190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
	195					200					205				
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210				215					220					
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225				230					235					240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245					250					255		
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260					265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275					280						285			
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<210> 2817

<211> 219

<212> DNA

<213> Homo sapiens

<400> 2817

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<210> 2818

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2818

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 Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
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 Gln His Thr Phe Ala Pro Phe Thr Arg
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<210> 2819

<211> 730

<212> DNA

<213> Homo sapiens

<400> 2819

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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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		20					25						30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
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65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85						90					95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115				120						125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145				150						155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170						175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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Thr	Glu	Pro													
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<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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420
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<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His	
		35				40					45				
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50				55					60					
Pro	Leu	Asp	Lys	His	Met	Glu	Met	Glu	Asp	Ile	Ser	Ser	Glu	Glu	Val
65					70				75					80	
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
			85					90					95		
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
		100					105					110			
Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
	115					120					125				
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
	130				135					140					
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu
145					150				155					160	
Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
			165					170						175	
Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
		180					185					190			
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly
	195					200					205				
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu
	210				215						220				
Glu	Asp	Glu	Met	Glu	Glu	Ser	Thr	Asn	Arg	Pro	Arg	Lys	Lys	Gln	Lys
225					230				235					240	
Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
			245					250						255	
His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile
		260					265					270			
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
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Gly	Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile
	290					295					300				
Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg
305					310				315					320	
His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
			325					330						335	
Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser

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Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
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Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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461

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<210> 2824

<211> 81

<212> PRT

<213> Homo sapiens

<400> 2824

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          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825
<211> 1520
<212> DNA
<213> Homo sapiens

<400> 2825
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120
gatggacatg tagaggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct
180
gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca
240
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300
ttgatggaag cagctcgaga aggacatgaa gaaatgggtg cattacttct tagcacaagg
360
agcnaatat caatgcacag acagaagaaa ctcaagaaac tgctcttgac tctggcttgc
420
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480
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540
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<210> 2826
 <211> 506
 <212> PRT
 <213> Homo sapiens

<400> 2826
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 Thr Ala Leu Met Glu Ala Cys Met Asp Gly His Val Glu Val Ala Arg
 35 40 45
 Leu Leu Leu Asp Ser Gly Ala Gln Val Asn Met Pro Ala Asp Ser Phe
 50 55 60
 Glu Ser Pro Leu Thr Leu Ala Ala Cys Gly Gly His Val Glu Leu Ala
 65 70 75 80
 Ala Leu Leu Ile Glu Arg Gly Ala Asn Leu Glu Glu Val Asn Asp Glu
 85 90 95
 Gly Tyr Thr Pro Leu Met Glu Ala Ala Arg Glu Gly His Glu Glu Met
 100 105 110
 Val Ala Leu Leu Leu Ser Thr Arg Ser Xaa Ile Ser Met His Arg Gln
 115 120 125
 Lys Lys Leu Lys Lys Leu Leu Thr Leu Ala Cys Cys Gly Gly Phe
 130 135 140
 Leu Glu Val Ala Asp Phe Leu Ile Lys Ala Gly Ala Asp Ile Glu Leu
 145 150 155 160
 Gly Cys Ser Thr Pro Leu Met Glu Ala Ala Gln Glu Gly His Leu Glu
 165 170 175
 Leu Val Lys Tyr Leu Leu Ala Ala Gly Ala Asn Val His Ala Thr Thr
 180 185 190
 Ala Thr Gly Asp Thr Ala Leu Thr Tyr Ala Cys Glu Asn Gly His Thr
 195 200 205
 Asp Val Ala Asp Val Leu Leu Gln Ala Gly Ala Asp Leu Asp Lys Gln
 210 215 220
 Glu Asp Met Lys Thr Ile Leu Glu Gly Ile Asp Pro Ala Lys His Leu
 225 230 235 240
 Glu His Glu Ser Glu Gly Gly Arg Thr Pro Leu Met Lys Ala Ala Arg
 245 250 255
 Ala Gly His Val Cys Thr Val Gln Phe Leu Ile Ser Lys Gly Ala Asn
 260 265 270
 Val Asn Arg Thr Thr Ala Asn Asn Asp His Thr Val Leu Ser Leu Ala
 275 280 285
 Cys Ala Gly Gly His Leu Ala Val Val Glu Leu Leu Ala His Gly
 290 295 300
 Ala Asp Pro Thr His Arg Leu Lys Asp Gly Ser Thr Met Leu Ile Glu
 305 310 315 320
 Ala Ala Lys Gly Gly His Thr Ser Val Val Cys Tyr Leu Leu Asp Tyr
 325 330 335
 Pro Asn Asn Leu Leu Ser Ala Pro Pro Pro Asp Val Thr Gln Leu Thr

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Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala
          355          360          365
Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn
          370          375          380
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys
385          390          395          400
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
          405          410          415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
          420          425          430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
          435          440          445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys
          450          455          460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
465          470          475          480
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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481

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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	20	25	30
Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
65	70	75	80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala			
145	150	155	160

<210> 2829

<211> 3648

<212> DNA

<213> Homo sapiens

<400> 2829

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<210> 2830

<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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<210> 2831

<211> 3986

<212> DNA

<213> Homo sapiens

<400> 2831

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<211> 611

<212> PRT

<213> Homo sapiens

<400> 2832

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Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
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Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
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Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
          180          185          190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
          195          200          205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
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          325          330          335
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<212> DNA

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<400> 2834
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 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
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 <211> 938
 <212> DNA
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Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
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Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
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			100					105					110		
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<212> DNA

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			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50			55					60					
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65				70				75					80		
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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      115      120      125
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  130      135      140
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  145      150      155      160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165      170      175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180      185      190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195      200      205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210      215      220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
  225      230      235      240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245      250      255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260      265      270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275      280      285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290      295      300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
  305      310      315      320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325      330      335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
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Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
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Ser Phe
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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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420

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<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

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				20				25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35				40					45				
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50				55					60					
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
65				70				75						80	
Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
			85					90					95		
Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
			100					105					110		
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
	115					120						125			
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
	130					135					140				
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
145				150				155						160	
Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
			165					170					175		
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
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<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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			20					25					30		
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
		35					40					45			
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr	
	50					55				60					
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
65					70				75					80	
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
			85					90					95		
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
			100					105					110		
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
		115					120					125			
Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe
	130					135					140				
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
145				150					155					160	
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
			165					170					175		
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
	195						200					205			
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
	210				215					220					
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
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Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
			245					250					255		
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
		260					265					270			
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
	275					280						285			
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

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Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys				
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu				
	325		330	335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu				
	340		345	350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val				
	355		360	365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys				
	370		375	380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro				
385		390		395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile				
	405		410	415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu				
	420		425	430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val				
	435		440	445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His				
	450		455	460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu				
465		470		475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile				
	485		490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro				
	500		505	510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro				
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Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly				
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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<210> 2844
<211> 165
<212> PRT
<213> Homo sapiens

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35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
145 150 155 160
Gln Ala Ser Thr Pro
165

<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

<400> 2845
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120
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360
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420
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480

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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
	50					55				60					
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120				125				
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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<212> PRT

<213> Homo sapiens

<400> 2848

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<212> DNA

<213> Homo sapiens

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 Ala Ala Val Thr His Gly Ala Leu Gln Gly Leu Ala Tyr Leu His Ser
 130 135 140
 His Asn Met Ile His Arg Asp Val Lys Ala Gly Asn Ile Leu Leu Ser
 145 150 155 160
 Glu Pro Gly Leu Val Lys Leu Gly Asp Phe Gly Ser Ala Ser Ile Met
 165 170 175
 Ala Pro Ala Asn Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu
 180 185 190
 Val Ile Leu Ala Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Val
 195 200 205
 Trp Ser Leu Gly Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro
 210 215 220
 Leu Phe Asn Met Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn
 225 230 235 240
 Glu Ser Pro Val Leu Gln Ser Gly His Trp Ser Glu Tyr Phe Arg Asn

2091

675					680					685					
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690					695					700					
Leu	Thr	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Gly	Asn	Gln	Leu	Glu	Tyr
705				710						715					720
Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala	Ala	Gln	Val
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Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln	Arg	Pro	Pro
			740					745					750		
Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro	Asn	Thr	Gly
		755					760					765			
Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu	Ala	Val	Leu
		770				775					780				
Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Glu	Ala	Val	Gly	Glu	Arg	Arg
785				790						795					800
Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln	Gln	Arg	Ile
				805					810					815	
Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln	Lys	His	Gly
			820					825					830		
Ser	Leu	Val	Asp	Glu	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	Ile	Glu	Glu
			835				840						845		
Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Glu	Arg	Ser	Ile	Val	Gly	Gln
			850				855					860			
Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp	Glu	Ser	Leu
865				870						875					880
Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro	Ala	Leu	Thr
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Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	Pro	Ile	Gly	
			900					905					910		
Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp	Ile	Pro	Pro
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Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser	Gln	Leu	Pro
			930				935						940		
Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe	Ala	Val	Gly
945				950						955					960
Ser	Ser	Ser	Gly	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu
				965					970					975	
Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu	Leu	Ala	Leu
			980					985					990		
Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Leu	Cys	Thr
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Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala	Gln	Gly	Thr
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Ala	Leu	Pro	Leu	Val	Ala	Met	Ala	Ala	Gly	Gly	Arg	Trp	Val	Arg	Gln
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Ala	Val	Gly	Asp	Arg	Gly	Leu	Phe	Ala	Leu	Tyr	Pro	Lys	Thr	Asn	Lys

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 Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn
 1125 1130 1135
 Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val
 1140 1145 1150
 Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu
 1155 1160 1165
 Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
 1170 1175 1180
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg
 1185 1190 1195 1200
 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
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 Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro
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 Pro Trp Arg
 1235

<210> 2855

<211> 1676

<212> DNA

<213> Homo sapiens

<400> 2855

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 acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtcttcagag
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 360
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 420
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 480
 acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc
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 780
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 840
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 900

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 960
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 1080
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 1320
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 1380
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 1440
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

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 20 25 30
 Gln Thr Ile Thr Gly Ser Asp Pro Glu Glu Ala Ile Phe Asp Thr Leu
 35 40 45
 Cys Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile
 50 55 60
 Leu Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu
 65 70 75 80
 Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg
 85 90 95
 Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr
 100 105 110
 Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro
 115 120 125
 Val Ile Thr Pro Ser Trp Ser Pro Gly Ser Asp Val Thr Leu Leu Ala
 130 135 140
 Glu Ala Leu Val Thr Val Thr Asn Ile Glu Val Ile Asn Cys Ser Ile
 145 150 155 160
 Thr Glu Ile Glu Thr Thr Thr Ser Ser Ile Pro Gly Ala Ser Asp Thr

165 170 175
 Asp Leu Ile Pro Thr Glu Gly Val Lys Ala Ser Ser Thr Ser Asp Pro
 180 185 190
 Pro Ala Leu Pro Asp Ser Xaa Leu Lys Gln Asn His Thr Ser Leu Arg
 195 200 205
 Ser Xaa Ala Ser Ala Glu Thr Leu Ser Thr Ala Gly Thr Thr Glu Ser
 210 215 220
 Ala Ala Pro Asp Ala Thr Val Gly Thr Pro Leu Pro Thr Asn Ser Thr
 225 230 235 240
 Ile Glu Arg Glu Val Thr Ala Pro Arg Ala Thr Thr Leu Ser Gly Ala
 245 250 255
 Leu Val Thr Val Ser Arg Asn Pro Leu Glu Glu Thr Ser Ala Leu Ser
 260 265 270
 Val Glu Thr Pro Ser Tyr Val Lys Val Ser Gly Ala Ala Pro Val Ser
 275 280 285
 Ile Glu Ala Gly Ser Ala Val Gly Lys Thr Thr Ser Phe Ala Gly Ser
 290 295 300
 Ser Ala Ser Ser Tyr Ser Pro Ser Glu Ala Ala Leu Lys Asn Phe Thr
 305 310 315 320
 Pro Ser Glu Thr Pro Thr Met Asp Ile Ala Thr Lys Gly Pro Phe Pro
 325 330 335
 Thr Ser Arg Asp Pro Leu Pro Ser Val Pro Pro Thr Thr Thr Asn Ser
 340 345 350
 Ser Arg Gly Thr Asn Ser Thr Leu Ala Lys Ile Thr Thr Ser Ala Lys
 355 360 365
 Thr Thr Met Lys Pro Pro Thr Ala Thr Pro Thr Thr Ala Arg Thr Arg
 370 375 380
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 385 390 395 400
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<210> 2857

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2857

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 180
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 240
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 gaagcagaag ccgtagaatc agcggcgagc ctgttgaaag aaccacaggt tgcatttcac
 360
 agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
 420
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 480

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 540
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 600
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 720
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 780
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 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1320
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 1380
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 1560
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 1668

<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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 20 25 30
 Pro Glu Cys Ser Val Lys Gly Arg Thr Glu Ser Phe His Cys Pro Pro
 35 40 45
 Ala Gln Ser Cys Tyr Pro Val Thr Thr Lys His Glu Cys Ser Asp Lys

50 55 60
 Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu
 65 70 75 80
 Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro
 85 90 95
 Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu
 100 105 110
 Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile
 115 120 125
 Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
 130 135 140
 Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
 145 150 155 160
 Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
 165 170 175
 Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
 180 185 190
 Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
 195 200 205
 Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
 210 215 220

<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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 caccgggcaa tgttcctctg aagggggcagc ggtagtggca gcgcctctgc tctcaatgca
 180
 gcaggtaccg gcgtcggtag taatgccaca tcttcgagg attttccgcc tccgtcgtg
 240
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 300
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 420
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 480
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 540
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 660
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 720
 catcagattc atcatgggca ccacctcaa catggtcacc accatccatc tcatgttgc
 780

gtggccagtg catccattac tgggtgggcca ccctcaagcc cagtatctag aaaactctct
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 1029

<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg	
		35				40					45					
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly	
	50				55				60							
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu	
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Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro	
			85					90					95			
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala	
			100					105					110			
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe	
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Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser	
	130					135				140						
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu	
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	210					215					220					
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His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro	
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Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser	
		260					265					270				
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile	
	275					280					285					
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala	

290 295 300
 Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
 305 310 315 320
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<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

<400> 2861
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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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 Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
 35 40 45
 Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro
65              70              75              80
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala
      85              90              95
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr
      100              105              110
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys
      115              120              125
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln
      130              135              140
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser
145              150              155              160
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr
      165              170              175
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His
      180              185              190
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr
      195              200              205
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro
      210              215              220
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu
225              230              235              240
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg
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<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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120
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180
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240
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300
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<213> Homo sapiens

<400> 2864

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Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg
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145 150 155 160
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro
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Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala
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<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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<213> Homo sapiens

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<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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 <212> PRT
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 35 40 45
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<212> PRT

<213> Homo sapiens

<400> 2870

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<211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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<210> 2873

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<210> 2874

<211> 248

<212> PRT

<213> Homo sapiens

<400> 2874

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 35 40 45
 Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
 50 55 60
 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
 65 70 75 80
 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
 85 90 95
 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
 100 105 110
 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
 115 120 125
 Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
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 Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
 145 150 155 160
 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
 165 170 175
 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
 180 185 190
 Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
 195 200 205
 Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
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<211> 593

<212> DNA

<213> Homo sapiens

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 Phe Thr Leu Arg His Phe Ile Val Tyr Pro Pro Glu Ser Ala Ile Gln
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 Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg
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 Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile
 115 120 125
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 130 135 140
 Ala Leu Ile Gln Asn Ser Asp Thr Thr Leu Glu Leu Ser Val Met Pro
 145 150 155 160
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 <212> DNA
 <213> Homo sapiens

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 1921

<210> 2878
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 <212> PRT
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 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
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 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser
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 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp
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 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe
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 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
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 Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val Leu
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 Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe
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 165 170 175
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 195 200 205
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
 210 215 220
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val
 225 230 235 240
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
 245 250 255
 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu
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 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
 275 280 285
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
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 Arg Asp Ala Leu Ser Gln Leu Met Asn Gly Pro Ile Arg Lys Lys Leu
 305 310 315 320
 Lys Ile Ile Pro Glu Asp Gln Ser Trp Gly Gly Gln Ala Thr Asn Val

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Phe Val Asn Met Glu Glu Asp Phe Met Lys Pro Val Ile Asp Ile Val
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          355          360          365
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          370          375          380
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala
385          390          395          400
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser
          405          410          415
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val
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<210> 2879

<211> 1352

<212> DNA

<213> Homo sapiens

<400> 2879

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<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro	50	55	60	
Ala	Arg	Gly	Glu	Arg	Pro	Pro	Arg	Leu	Gly	Leu	Pro	Thr	Pro	Gly	Val	65	70	75	80
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Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala	130	135	140	
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val	165	170	175	
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Gly	Arg	Pro	Pro	Ala	Pro	Gly	Val	Phe	Ala	Gly	Phe	His	Tyr	Pro	Gln	210	215	220	
Asp	Leu	Ala	Arg	Pro	Leu	Phe	Pro	Ser	Thr	Gly	Ala	Ala	His	Pro	Ala	225	230	235	240
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Ala	Pro	Gly	Gly	Ser	Ile	Phe	Ala	Pro	Lys	Glu	Gly	Ser	Ser	Val	Leu
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Arg	Val	Ser	Ala	Leu	Thr	Asn	His	Asp	Arg	Glu	Pro	Val	Asn	Gly	Lys
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<210> 2881

<211> 3021

<212> DNA

<213> Homo sapiens

<400> 2881

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
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 <211> 516
 <212> DNA
 <213> Homo sapiens

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<211> 172

<212> PRT

<213> Homo sapiens

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			50				55				60				
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
65					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
			85					90					95		
His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
			100					105					110		
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
			115				120					125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
			130				135				140				
Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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Asn	Gln	Gly	Glu	Leu	Leu	Gly	Asp	Met	Asp	Arg	Asn				
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<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 300

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 420
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 540
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 660
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 720
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 807

<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
			35				40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
	50					55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65					70					75				80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90					95		
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
			100					105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
		115					120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
	130					135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
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Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170					175		
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180					185					190		
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
		195				200						205			
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
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1260

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<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
		35					40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
	50					55				60					
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
			85					90					95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
		100						105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
		115					120					125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
	130					135					140				
Glu	Pro	Met	Leu	Gly	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala	
145					150				155					160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
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<210> 2889
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<212> DNA
<213> Homo sapiens
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<210> 2890
<211> 204
<212> PRT
<213> Homo sapiens
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2123

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      35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
      50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
      65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
      85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
      100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
      115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
      130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
      145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
      165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
      180          185          190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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480
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<210> 2892

<211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2892
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 20 25 30
 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
 35 40 45
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50 55 60
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
 65 70 75 80
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
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<210> 2893
 <211> 2270
 <212> DNA
 <213> Homo sapiens

<400> 2893
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 480
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<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30		
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
		35					40					45			
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
		50				55					60				
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
65					70					75					80
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
			85						90					95	
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
			100					105					110		
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
		115					120					125			
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
		130				135					140				
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
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Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
				165					170					175	
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
			180					185					190		
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
		195					200					205			
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
		210				215					220				
Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
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Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met
				245					250					255	
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
		260					265						270		
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
		275					280					285			
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu
		290				295					300				
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
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Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
				325					330					335	
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
			340					345					350		
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu
		355					360					365			
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro
		370				375					380				
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385				390					395						400
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
				405					410					415	
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
				420				425					430		
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

435 440 445
 Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
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 Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
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 Thr Leu Leu Gln Gln Leu Asp Asp His Gln
 485 490

<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

<400> 2895
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 240
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<210> 2896
 <211> 174
 <212> PRT
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 35 40 45
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
 50 55 60
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65          70          75          80
Ala Pro Ala Pro Cys Ser Asn Arg Leu Arg Ser Pro Ser Pro Pro Ser
          85          90          95
Leu Pro Pro Asp Arg Pro Arg Pro Pro Ala Arg Arg His Ser Phe Arg
          100          105          110
Gly Pro Ala Leu Arg Ser Gly Pro Pro Leu Pro Pro Pro Pro Arg Arg
          115          120          125
Pro Leu Leu Arg Pro Pro Val Ala Ala Ala Leu Pro Pro Gln Pro Ala
          130          135          140
Pro Ser Leu Pro Ala Ser Arg Ala His Ser Cys Pro Gly Arg Pro Arg
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Leu Gly Gly Val Glu Gln Pro Leu Glu Val Leu Gly Asp Ala
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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
			35				40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65					70					75				80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
		115						120				125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
		130				135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150					155					160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
				165					170					175	
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200					205				
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr	Leu Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys	Leu Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu	Glu Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His	Pro Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro	Leu Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Ser His Lys	Glu Gly Thr Tyr Ala	Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile	Glu Met Val Thr Pro Val

645 650 655
 Arg Gln Val Ala Ser Ala Ser Ile Lys Leu Glu Asn Pro Leu Pro Tyr
 660 665 670
 Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro
 675 680 685
 Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu
 690 695 700
 Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His
 705 710 715 720
 Asn Thr Asp Leu Gly Tyr Tyr Gln Tyr Glu Leu Tyr Leu Lys Ala Thr
 725 730 735
 Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser
 740 745 750
 Ser Gln Ile Ile Leu Val Lys Phe Ile Asn Tyr Thr Arg Gln Arg Thr
 755 760 765
 Glu Tyr Tyr Cys Arg Thr Asp Cys Thr Asp Phe His Ala Glu Lys Leu
 770 775 780
 Ile Asn Ala Ala Pro Gly Gly Gln Gly Gly Thr Glu Ala Ser Val Glu
 785 790 795 800
 Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile
 805 810 815
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 820 825 830
 Ala Leu Pro Pro Lys Pro Gln Gly Pro Phe Ser Ile Arg Ala Gly Tyr
 835 840 845
 Ser Ile Ile Ile Pro Phe Lys Asn Val Phe Tyr His Met Val Thr Phe
 850 855 860
 Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser
 865 870 875 880
 Val Arg Pro Lys Lys Ile Asn Asn Ile Thr Val Ser Phe Glu Gly Asn
 885 890 895
 Pro Ser Gly Ser Lys Thr Pro Ile Thr Thr Lys Leu Thr Val Ser Cys
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 Pro Pro Gly Glu Gly Ser Glu Thr Gly Val Lys Trp Val Tyr Tyr Leu
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 Lys Gly Ile Thr Leu
 930

<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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 300

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 780
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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
		20					25						30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg	Ser
		35					40					45			
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
		50				55				60					
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met	His
65				70					75					80	
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu	Asn
			85					90					95		
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp	Val
		100					105						110		
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp	Thr
	115					120					125				
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu	Val
	130					135					140				
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu	Asp
145					150				155					160	
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
			165					170						175	
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
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<210> 2901

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65				70					75					80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90					95		
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120					125				
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu
 145 150 155

<210> 2903
 <211> 542
 <212> DNA
 <213> Homo sapiens

<400> 2903
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 180
 aagccctact acgaggtgcg gctgggttct gtgcttggct cagagccttc cctggactct
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 300
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 420
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 540
 gt
 542

<210> 2904
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2904
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 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

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      130              135              140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg
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Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala
      165              170              175
Pro Pro Ser Arg
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<210> 2905
 <211> 814
 <212> DNA
 <213> Homo sapiens

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<400> 2905
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180
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240
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360
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420
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480
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720
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<210> 2906
 <211> 200
 <212> PRT
 <213> Homo sapiens

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<400> 2906
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Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala
      20          25          30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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      35      40      45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50      55      60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65      70      75      80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85      90      95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100      105      110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115      120      125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130      135      140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
      145      150      155      160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165      170      175
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<210> 2907

<211> 379

<212> DNA

<213> Homo sapiens

<400> 2907

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240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
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<210> 2908

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2908

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      20      25      30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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35 40 45
 Gly Lys Gly Ile Leu Pro Leu Met Leu Asp Gly Pro Glu Thr Ala Pro
 50 55 60
 Pro Trp Ala His Tyr Thr Gly Thr Ser Phe Lys Leu Pro Cys Ser Thr
 65 70 75 80
 Arg Arg Ala Pro Gln Pro Arg Thr Thr Glu Gln Met Met Ala Arg Arg
 85 90 95
 Pro Gln Asn Pro Asp Arg Pro Ser Trp Leu Ala Leu Ala Asp Ala Thr
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<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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 180
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 240
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 720
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 780
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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

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      20           25           30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
      65           70           75           80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85           90           95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100          105          110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
      115          120          125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
      130          135          140
Cys Leu Gly Leu Ile Gly Arg Leu Val
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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cagttactga aactagaaac caatgaattc caacaacttc aaagtaaaat cagtttaatt
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420
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720
cttctttcaa gcagtattga tcgaacagca acgctccgaa agacagcatc tgaaaattca
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caaagaatta actctgttaa gaagacgcta accgaactaa agagtgactt cgacaaacat
840

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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
			35				40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
			50			55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65				70				75					80		
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85					90					95		
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
			115				120						125		
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
			130			135						140			
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145				150				155					160		
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170					175		
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180				185						190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
			195			200					205				
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210				215				220							
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

225		230		235		240									
Ser	Val	Lys	Lys	Thr	Leu	Thr	Glu	Leu	Lys	Ser	Asp	Phe	Asp	Lys	His
			245					250						255	
Thr	Asp	Arg	Phe	Leu	Ser	Leu	Glu	Gly	Asp	Arg	Ala	Lys	Val	Leu	Lys
			260					265					270		
Thr	Val	Thr	Phe	Ala	Asn	Asp	Leu	Lys	Pro	Lys	Val	Tyr	Asn	Leu	Lys
		275					280					285			
Lys	Asp	Phe	Ser	Arg	Leu	Glu	Pro	Leu	Val	Asn	Asp	Leu	Thr	Leu	Arg
	290					295				300					
Ile	Gly	Arg	Leu	Val	Thr	Asp	Leu	Leu	Gln	Arg	Glu	Lys	Glu	Ile	Ala
305					310					315					320
Phe	Leu	Ser	Glu	Lys	Ile	Ser	Asn	Leu	Thr	Ile	Val	Gln	Ala	Glu	Ile
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<210> 2913

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2913

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180
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240
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361

<210> 2914

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2914

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			20					25					30		
Cys	Asn	Met	Glu	Ile	Gly	Ile	Ile	Ile	Arg	Asn	Gly	Ser	Gln	Asp	Gly
		35				40						45			
Pro	Glu	Pro	Ser	Ile	Ser	Gly	Leu	Lys	Lys	Leu	His	Pro	Gln	Leu	Ser
	50					55					60				
Leu	Ser	Glu	Asp	Val	His	Ala	Pro	Gln	Val	Ala	Asn	Asp	Thr	Glu	Ala
65					70				75					80	
Gly	Arg	Lys	Leu	Asp	Val	Gly	Pro	Gln	Leu	Leu	Asp	Gln	Leu	Ala	Gln

	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
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<210> 2915
 <211> 1782
 <212> DNA
 <213> Homo sapiens

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 240
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 300
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 360
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 420
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 480
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 1680
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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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		20					25					30			
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
	35					40					45				
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50					55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
	65				70					75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85					90					95		
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
		100						105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
	115						120					125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
	145				150					155				160	
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165					170						175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180						185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
	195					200					205				
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
	210					215					220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
	225			230						235				240	
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
			245					250					255		
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly

260 265 270
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 275 280 285
 Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
 290 295 300
 Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
 305 310 315 320
 Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
 325 330 335
 Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
 340 345 350
 Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
 355 360 365
 Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Ile Arg
 370 375 380
 Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
 385 390 395 400
 Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
 405 410 415
 Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
 420 425 430
 Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
 435 440 445
 Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
 450 455 460
 Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
 465 470 475 480
 His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
 485 490 495
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 Asn Glu Ile Gln Gln Asp Met
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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 420

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
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Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
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Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65				70					75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90						95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
	115						120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
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Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
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His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195						200					205			
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210	215	220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu		
225	230	235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
305	310	315
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		320
	325	330
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		335
	340	345
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		350
	355	360
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
	370	375
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
385	390	395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		400
	405	410
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
	420	425
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		430
	435	440
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		445
	450	455
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
465	470	475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		480
	485	490
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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300

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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			20					25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
			35				40					45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55				60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65					70				75					80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
				85				90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
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<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
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Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
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Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
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325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

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440

445

<210> 2923
<211> 572
<212> DNA
<213> Homo sapiens

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<210> 2924
<211> 91
<212> PRT
<213> Homo sapiens

<400> 2924
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20 25 30
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro
35 40 45
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala
50 55 60
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly
65 70 75 80
Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln
85 90

<210> 2925
<211> 1999
<212> DNA
<213> Homo sapiens

<400> 2925

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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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			20					25					30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
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Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
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His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
			85						90					95	
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
		100						105					110		
Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
		115				120					125				
Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
		130				135					140				
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Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
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Thr	Asp	Thr	Trp	Ala	Tyr	Ile	Ala	Ala	Glu	Gly	Asp	Gln	Glu	Val	Leu
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<210> 2927

<211> 1084

<212> DNA

<213> Homo sapiens

<400> 2927

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 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys
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 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu
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 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
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 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
 115 120 125
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 225 230 235 240
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<211> 1166

<212> PRT

<213> Homo sapiens

<400> 2930

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Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
 50          55          60
Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
 65          70          75          80
Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
          85          90          95
Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
          100          105          110
Lys Pro Asn Thr Pro Ile Gly Met Leu Glu Val Glu Lys Val Ile Leu
          115          120          125
Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
          130          135          140
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
          145          150          155          160
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
          165          170          175
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
          180          185          190
Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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Ile Ser Gln Asn Leu Asp Ile Met Lys Glu Lys Glu Asn Lys Gly Phe
          225          230          235          240
Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser
          245          250          255
Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
          260          265          270
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          275          280          285
Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
          290          295          300
Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
          305          310          315          320
Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
          325          330          335
Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala
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          355          360          365
Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

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Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser		430
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Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu		445
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Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser		460
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	500	505
Ser Met Glu Glu Lys Gln Glu Thr Lys Ser Thr Asp Gly Gln Glu Pro		510
	515	520
His Ser Val Val Tyr Asp Thr Ser Asn Gly Lys Lys Val Val Asp Ser		525
	530	535
Ile Arg Asn Leu Lys Ser Leu Gly Pro Asn Gln Glu Asn Val Gln Asn		540
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Glu Ile Ile Val Tyr Pro Glu Asn Thr Glu Asp Asn Met Lys Asn Gly		560
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625	630	635
Ala Ile Gln Thr Thr Pro Ser Cys Asn Ser Phe Asp Gly Lys His Gln		640
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Asp His Asn Leu Ser Asp Ser Lys Val Glu Glu Cys Val Gln Thr Ser		655
	660	665
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Ser Glu Asp Pro Leu Thr Val Lys Asp Pro Ile Cys Ala His Gly Asn		700
705	710	715
Asp Asp Leu Leu Pro Pro Val Asp Arg Ile Asp Lys Asn Ser Thr Ala		720
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Ser Tyr Leu Lys Asn Tyr Pro Leu Tyr Arg Gln Asp Tyr Asn Pro Lys		735
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Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly		750
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		20					25					30			
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		35				40						45			
Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
	50				55					60					
Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
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<210> 2933

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<212> DNA

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<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
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Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
			50			55					60				
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Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
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Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
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Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180					185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
			195				200					205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 2935
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240
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<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
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Pro	Leu	Pro	Ser	Cys	Gln	Tyr	Arg	Asp	Lys	Leu	Lys	Lys	Lys	Lys	Lys
		20					25					30			
Val	Lys	Val	Lys	Met	Glu	Lys	Lys	Ser	Thr	Pro	Ser	Arg	Gly	Ser	Ser
		35					40					45			
Ser	Lys	Ser	Ser	Ser	Arg	Gln	Leu	Ser	Glu	Ser	Phe	Lys	Ser	Lys	Glu
		50				55					60				
Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys
65					70					75				80	
Lys	Arg	Arg	Arg	Ser	Glu	Asp	Ser	Glu	Glu	Glu	Glu	Leu	Ala	Ser	Thr
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Pro	Pro	Ser	Ser	Glu	Asp	Ser	Ala	Ser	Gly	Ser	Asp	Glu			
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<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

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Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln			
	35	40	45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
	50	55	60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
65	70	75	80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
	85	90	95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
	100	105	110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
	115	120	125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
	130	135	140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
145	150	155	160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
	165	170	175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
	180	185	190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
	195	200	205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
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Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
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<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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240
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300
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420
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480

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<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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			20					25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55					60				
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75					80
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
				85					90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
			100					105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
		115					120					125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
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His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150					155					160
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
			165						170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
		180					185						190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
		195					200					205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215					220				
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225				230						235					240
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
			245						250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
		260					265					270			
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys

275		280		285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala				
290		295		300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr				
305		310		315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser				
	325		330	335
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr				
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Met Glu Val Ser Cys				
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<210> 2941

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2941

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 847

<210> 2942

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
 210 215 220
 Gln Asp Pro Gln Ala
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<210> 2943

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2943

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<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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		20						25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
		50				55				60					
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70					75					80	
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<210> 2945
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<212> DNA
<213> Homo sapiens
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<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
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 Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu
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 Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala
 225 230 235 240
 Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp
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 Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile
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 Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp
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 Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln
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<210> 2947

<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
			100					105					110		
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<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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			20					25					30		
Lys	Gly	Lys	Arg	Pro	Asn	Leu	Lys	Val	His	Ile	Asn	Thr	Thr	Ser	Asp
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Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
			100					105					110		
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
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Ile	Trp	Ser	Lys	Ile	Phe	Asn	His	Lys	Thr	Val	Val	Gly	Ser	Lys	Lys
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Ile	Gln	Asn	Val	Thr	His	Lys	Asp	Ser	Ala	Lys	Ser	Pro	Glu	Lys	Ala
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu
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          370          375          380
Arg Leu Glu Pro Glu Ser Glu Tyr Tyr Lys Leu Arg Leu Gly Arg Tyr
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 2954

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<212> PRT

<213> Homo sapiens

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835					840					845					
Gln	Phe	His	Leu	Lys	Asn	Phe	Asp	Met	Val	Ile	Val	Tyr	Lys	Asp	Tyr
850	855					860									
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<210> 2959

<211> 3323

<212> DNA

<213> Homo sapiens

<400> 2959

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<210> 2960

<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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 50 55 60
 Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro
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 Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys
 85 90 95
 Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala
 100 105 110
 Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala
 115 120 125
 Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu
 130 135 140
 Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe
 145 150 155 160
 Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr

2195

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 625 630 635 640
 Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu
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 660 665 670
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 785 790 795 800
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 Met Pro Met Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro
 820 825 830
 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly
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<210> 2961

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
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<210> 2963
 <211> 567
 <212> DNA
 <213> Homo sapiens

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 <211> 115
 <212> PRT

<213> Homo sapiens

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Gly Trp Arg Gly Asp Thr Cys Gln Ser Gly Glu Ala Gly Ser Thr Leu
      35           40           45
Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
      50           55           60
Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
65           70           75           80
Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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840

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<210> 2966

<211> 386

<212> PRT

<213> Homo sapiens

<400> 2966

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Glu Val Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser
      65      70      75      80
Leu Thr Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe
      85      90      95
Thr Arg Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg
      100      105      110
Ile Asp Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro
      115      120      125
Pro Tyr Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe
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      165      170      175
Pro Glu Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr
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Asp Met Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile
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      225      230      235      240
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      245      250      255
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      275      280      285
Pro Glu Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu
      290      295      300
Leu Glu Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser
      305      310      315      320
Cys Lys Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala
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Ser Gly Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu
      340      345      350
Asn Val Pro Val Asp Asp Ser Leu Val Lys Glu Leu Leu Arg Met Cys
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<210> 2967

<211> 1103

<212> DNA

<213> Homo sapiens

<400> 2967

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<211> 126

<212> PRT

<213> Homo sapiens

<400> 2968

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<213> Homo sapiens

<400> 2969

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<212> PRT

<213> Homo sapiens

<400> 2970

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<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
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Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
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Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
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<212> DNA

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<211> 1425

<212> DNA

<213> Homo sapiens

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

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Val	Ala	Gly	Phe	Asp	Leu	Asp	Gly	Thr	Leu	Ile	Thr	Thr	Arg	Ser	Gly		
100								105				110					
Lys	Val	Phe	Pro	Thr	Gly	Pro	Ser	Asp	Trp	Arg	Ile	Leu	Tyr	Pro	Glu		
115								120				125					
Ile	Pro	Arg	Lys	Leu	Arg	Glu	Leu	Glu	Ala	Glu	Gly	Tyr	Lys	Leu	Val		
130								135				140					
Ile	Phe	Thr	Asn	Gln	Met	Ser	Ile	Gly	Arg	Gly	Lys	Leu	Pro	Ala	Glu		
145								150				155					
Glu	Phe	Lys	Ala	Lys	Val	Glu	Ala	Val	Val	Glu	Lys	Leu	Gly	Val	Pro		
165								170				175					
Phe	Gln	Val	Leu	Val	Ala	Thr	His	Ala	Gly	Leu	Tyr	Arg	Lys	Pro	Val		
180								185				190					
Thr	Gly	Met	Trp	Asp	His	Leu	Gln	Glu	Gln	Ala	Asn	Asp	Gly	Thr	Pro		
195								200				205					
Ile	Ser	Ile	Gly	Asp	Ser	Ile	Phe	Val	Gly	Asp	Ala	Ala	Gly	Arg	Pro		
210								215				220					
Ala	Asn	Trp	Ala	Pro	Gly	Arg	Lys	Lys	Lys	Asp	Phe	Ser	Cys	Ala	Asp		
225								230				235					
Arg	Leu	Phe	Ala	Leu	Asn	Leu	Gly	Leu	Pro	Phe	Ala	Thr	Pro	Glu	Glu		
245								250				255					
Phe	Phe	Leu	Lys	Trp	Pro	Ala	Ala	Gly	Phe	Glu	Leu	Pro	Ala	Phe	Asp		
260								265				270					
Pro	Arg	Thr	Val	Ser	Arg	Ser	Gly	Pro	Leu	Cys	Leu	Pro	Glu	Ser	Arg		
275								280				285					
Ala	Leu	Leu	Ser	Ala	Ser	Pro	Glu	Val	Val	Val	Ala	Val	Gly	Phe	Pro		
290								295				300					
Gly	Ala	Gly	Lys	Ser	Thr	Phe	Leu	Lys	Lys	His	Leu	Val	Ser	Ala	Gly		
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Tyr	Val	His	Val	Thr	Gly	Thr	Arg										
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<210> 2977
<211> 1420
<212> DNA
<213> Homo sapiens
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120
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180
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240
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300
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360
ggtgtgggca gcctgnnngc cctggctatg agggccgacn acattgccat ggagaagggtg
420
gcatccagaa cataccggct acggctagag gctgccaggc ctggtgatgc gggcacctac
480

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cgctgcctcg ccaaagccta tgttcgaggg tctgggaccc ggcttcgtga agcagccagt
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 1320
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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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			20					25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
			35				40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50					55					60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70						75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
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Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg
      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
      210              215              220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
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Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
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<210> 2979

<211> 2191

<212> DNA

<213> Homo sapiens

<400> 2979

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<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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			20					25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
		35					40					45			
Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
		50					55				60				
Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
					70					75				80	
Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
				85				90						95	
Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
			100					105					110		
Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
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<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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<210> 2982
 <211> 107
 <212> PRT
 <213> Homo sapiens

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 His Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys
 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
 65 70 75 80
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
 85 90 95
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
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<210> 2983
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 <212> DNA
 <213> Homo sapiens

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 480
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<210> 2984
<211> 204
<212> PRT
<213> Homo sapiens

<400> 2984
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35 40 45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
50 55 60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
65 70 75 80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
85 90 95
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100 105 110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115 120 125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130 135 140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
165 170 175
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys
180 185 190
Glu Val Ser Lys Met His Gly Leu Ser Gly Glu Arg
195 200

<210> 2985
<211> 4547
<212> DNA
<213> Homo sapiens

<400> 2985
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<210> 2986

<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
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Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
		100						105					110		
Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

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Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
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Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
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225	230	235
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
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Phe Leu Pro Asp Leu Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met		
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Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Val Thr Pro Gln Val		
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Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg		
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Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu		
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Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly		
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Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe		
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Leu Glu Asp Met Glu Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu		
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Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu	Gly
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Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp	Met
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Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val	Val
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	770					775					780				
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785				790						795					800
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Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala	Thr
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Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln	Lys
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Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro	Met
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Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys	Asn
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985

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 <211> 1016
 <212> DNA
 <213> Homo sapiens

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<210> 2988
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2988
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240
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 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
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<210> 2991
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 <212> DNA
 <213> Homo sapiens

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<210> 2992
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 <212> PRT
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<400> 2992
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<210> 2993
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 <212> DNA
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<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

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Ile	Gly	Arg	Gly	Ser	Phe	Lys	Thr	Val	Tyr	Arg	Gly	Leu	Asp	Thr	Asp
	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
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Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
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His	Ser	Arg	Val	Pro	Pro	Ile	Leu	His	Arg	Asp	Leu	Lys	Cys	Asp	Asn
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Val	Phe	Ile	Thr	Gly	Pro	Thr	Gly	Ser	Val	Lys	Ile	Gly	Asp	Leu	Gly
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Leu	Ala	Thr	Leu	Lys	Arg	Ala	Ser	Phe	Ala	Lys	Ser	Val	Ile	Gly	Thr
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<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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ggtcctggag gaaagacatt tctcaagtgc ctcccttctg ccggcctttt accgccccga
1620
cgccccggcg ctaaggggcc aaaccgcccg gcccgagggg tcccaggggc gggccccgga
1680
gtacctggag gatatagacc tgaaaacact ggagaaggaa ccaaggactt tcaaagcaaa
1740
ggagctatgg gaaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttcct
1800
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1860

ccccctctat gcagtggta
1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

His	Gln	Glu	Arg	Asn	Phe	Thr	Leu	Ala	Ser	Asp	Tyr	Phe	Phe	Ile	Phe
1				5					10					15	
Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr
			20					25					30		
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
			35				40					45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
	50					55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70					75				80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
				85					90					95	
Thr	Pro	Asp	Leu	Lys											
				100											

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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gagccatcca aagtgcacatc tccagtggtc acctcttcca ccataaaaga cattgtttct
120
acaaccatac ctgcttcttc tgagataaca agaattgaga tggagtcaac atccaccctg
180
acccccacac caaggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcag
300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc
420
acccaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
acttttatgt cagggacceca ctcaactgca tctcaaagat tttcacactc acagatgacc
540
gctcttatga gtagaactcc tggagatgtg ccatggctaa cccatccctc tggggaagag
600
cccgccctctg cctctttctc actggcttca cctgtcttga cctcattttt ttcgtttttt
660
gccattcccc aaaaacctcc accttttttg gttcctgggc aaacttttcc cctagggctg
720

gggaaaccca aaatgtgggg ccaacccaga actgaaacat tcccccaat ggacaacctt
 780
 tttgaaaagg gcccttttgc
 800

<210> 2998
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2998
 Thr Gln Met Gly Thr Ile Ser Ala Arg Gln Glu Phe Tyr Ser Ser Tyr
 1 5 10 15
 Pro Gly Leu Pro Glu Pro Ser Lys Val Thr Ser Pro Val Val Thr Ser
 20 25 30
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu
 35 40 45
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro
 50 55 60
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser
 65 70 75 80
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met
 85 90 95
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr
 100 105 110
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser
 115 120 125
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly
 130 135 140
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr
 145 150 155 160
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His
 165 170 175
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp
 180 185 190
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu
 195 200 205
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln
 210 215 220
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu
 225 230 235 240
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro
 245 250 255
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe
 260 265

<210> 2999
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 2999
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<400> 3001

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 120
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgaggcat ccagcccagc tcaggccctg ccaccnca gtaccaaagc atcattgtca
 300
 ggcaaggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
 tcgtgtgtgc agacaaagag agccagctgg aggcctatga cttcccagag gtgcagcagg
 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattg cttccagggt gcaccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgccgcatgt accccaccct ggacttcctc aagagccaca
 720
 tcaagagggg cttcaggagg ggcttcagct gcaagggtga ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggtgg gagacaggct ctctccggc agctgccagg
 840
 ccttcaatag tcctgtgaa caccttaggc aaattggcgg tgaagcctac ttatgtctct
 900
 agagagatgc caataaagt agtcacagcc ttctgtccag tctgaggtca cccgcacag
 960
 cctgtgtcc tcccagaa cgggtctca tcaccttggt ctaatggttg cctagcaaca
 1020
 ccaggcacac accctccctt ttctctctt taaaaataaa gacaatactt gaagtttggg
 1080
 aaaatcaaaa aa
 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1			5					10					15		
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
		20					25					30			
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35				40					45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50				55				60						
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

```

65          70          75          80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
          85          90          95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
          100          105          110
Glu Arg Ser
          115

```

<210> 3003
 <211> 474
 <212> DNA
 <213> Homo sapiens

```

<400> 3003
gcgcgccatg gagccccggg cggttcgaga agccgtggag acgggtgagg aggatgtgat
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tatggaagct ctgcggtcat acaaccagga gcactcccag agcttcacgt ttgatgatgc
120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtac tggagtcctt
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggg
420
ccgcctagtg gtgaagctca cagagcgtgt ggggctgtac cgtgagagga gctc
474

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<210> 3004
 <211> 155
 <212> PRT
 <213> Homo sapiens

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<400> 3004
Met Glu Pro Arg Ala Val Ala Glu Ala Val Glu Thr Gly Glu Glu Asp
1      5      10      15
Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20     25     30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35     40     45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50     55     60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65     70     75     80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85     90     95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100    105    110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115    120    125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

```

130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 gacaacagtg acaacgtgga actcaagttc aatctggacc agtacgtcaa caagcggtag
 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggctg
 180
 cagggtctgga aggcggccac cgccccagtc gtcggcttct ttgatgcca cgtcgagttc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtag
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctggtgc atgtacatca tccccccgca ggactggctg
 420
 gaccgcgccg acgagtcagc acccatcagg accccagcca tgatcggtcg ctcttcgta
 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg
 600
 ccctgctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgccacc gccgaggtgt ggatggatga cttcaagtcc
 720
 cacgtgtaca tggcctggaa catccccatg tcgaaccagc ggggtggactt cggggacgtg
 780
 tctgagaggc tggccctgc
 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
 Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val
 1 5 10 15
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

```

65          70          75          80
Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg
          85          90          95
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe
          100          105          110
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu
          115          120          125
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp
          130          135          140
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val
          145          150          155          160
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met
          165          170          175
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln
          180          185          190
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile
          195          200          205
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys
          210          215          220
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser
          225          230          235          240
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp
          245          250          255
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu
          260          265

```

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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tatacctgca aatctggagc tcatgggtatt ggtgatgtgg aaacagctgt aaaatttgca
120
actcagetta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
180
gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat tttgaaaaca
240
tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat
300
attgcagcat acaacttgtg tgcagggtgct gtgaagtgcc tcttggagca gggagcaaat
360
cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat
420
atgccgttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
480
gatgcgggtg ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
536

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<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
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Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20              25              30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35              40              45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50              55              60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65              70              75              80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
      85              90              95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
      100             105             110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
      115             120             125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
      130             135             140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145             150             155             160
Pro Ser Arg

```

<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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nnacgcgtca gtctggaaag ggcacttata agagctacca gctgccctgt tggcttcgct
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ggtcggatcg tctcctggc cccgccaaac aggcgggggg agcggccccg actgtggggc
120
catggcagta gtctcctcgt tctccgccgc cgctagccta gctgagtcgc cggcttctgc
180
gctaggggct cccaccgcct ccgcaggcta aggagccgct gccaccaacg agctgtgagg
240
gttactatgc tccctctttg ccgcgcgtct ctcctcttgc ccgcgcaggc acccctctgg
300
ctgctcagtc ctgcctcagt gtcaaaccag aagagaagta aaattcaaca aaaatttatg
360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattatgt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
480
ggtggaggag aaggaaatgt gagccagggt ggaagagttt ggccatcttc gtatcgagct
540
cttataagtg ctttttccag actgacgcgt ttggatgatt tcacctgtaa aaaaataggg
600
tctggcttct tttctgaagt gttcaaggta cgacaccgag cttctgggtca ggtgatggct
660

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cttaagatga acacattgag cagtaaccgg gcaaacaatgc tgaaagaagt acagctcatg
 720
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa
 780
 ttgcattcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac
 840
 ctgcatttgc cttggactgt gagggtaaaa ctggcctatg acatagcagt gggcctcagc
 900
 taccttcact tcaaaggcat ttttcacgg gacctcacat ctaagaactg cctgataaag
 960
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 1020
 gatgtcagca tggggagtga gaagctggcc gtggtgggtt cccattctg gatggcacct
 1080
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 1140
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 1200
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 1335

<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

Met Asp Arg Ser Lys Arg Asn Ser Ile Ala Gly Phe Pro Pro Arg Val
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 Glu Arg Leu Glu Glu Phe Glu Gly Gly Gly Gly Glu Gly Asn Val
 20 25 30
 Ser Gln Val Gly Arg Val Trp Pro Ser Ser Tyr Arg Ala Leu Ile Ser
 35 40 45
 Ala Phe Ser Arg Leu Thr Arg Leu Asp Asp Phe Thr Cys Lys Lys Ile
 50 55 60
 Gly Ser Gly Phe Phe Ser Glu Val Phe Lys Val Arg His Arg Ala Ser
 65 70 75 80
 Gly Gln Val Met Ala Leu Lys Met Asn Thr Leu Ser Ser Asn Arg Ala
 85 90 95
 Asn Met Leu Lys Glu Val Gln Leu Met Asn Arg Leu Ser His Pro Asn
 100 105 110
 Ile Leu Arg Phe Met Gly Val Cys Val His Gln Gly Gln Leu His Ala
 115 120 125
 Leu Thr Glu Tyr Ile Asn Ser Gly Asn Leu Glu Gln Leu Leu Asp Ser
 130 135 140
 Asn Leu His Leu Pro Trp Thr Val Arg Val Lys Leu Ala Tyr Asp Ile
 145 150 155 160
 Ala Val Gly Leu Ser Tyr Leu His Phe Lys Gly Ile Phe His Arg Asp
 165 170 175
 Leu Thr Ser Lys Asn Cys Leu Ile Lys Arg Asp Glu Asn Gly Tyr Ser

	180		185		190
Ala Val Val	Ala Asp Phe Gly	Leu Ala Glu Lys Ile	Pro Asp Val Ser		
	195	200	205		
Met Gly Ser	Glu Lys Leu Ala Val	Val Gly Ser Pro Phe	Trp Met Ala		
	210	215	220		
Pro Glu Val	Leu Arg Asp Glu	Pro Tyr Asn Glu Lys	Ala Asp Val Phe		
225	230	235	240		
Ser Tyr Gly	Ile Ile Leu Cys	Glu Ile Ile Val	Arg Ile Gln	Ala Asp	
	245	250	255		
Pro Asp Tyr	Leu Pro Arg Thr	Glu Asn Phe Gly	Leu Asp Tyr	Asp Ala	
	260	265	270		
Phe Gln His	Met Val Gly Asp	Cys Pro Pro Asp	Phe Leu Gln	Leu Thr	
	275	280	285		
Phe Asn Cys	Cys Asn Val Ser	Val Phe Leu Pro	Leu Pro Phe	Ile Arg	
	290	295	300		
Gly Trp Leu	Asn Pro Phe				
305	310				

<210> 3011

<211> 3253

<212> DNA

<213> Homo sapiens

<400> 3011

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120
gacaccatga accacctgaa cgtgctggcc aaagcgtct atgacaatgt ggccgagtcc
180
ccggatgagc tctccttcgg caagggtgac atcatgacgg tgctggagca ggacacgcag
240
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300
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360
cccgccccc cggcccagcc tcagcctggc ctccatgcc cagcgcctcc ggcctcccag
420
tacacgcca tgctcccaa cacctaccag cccagccag acagcgtcta cctggtgccc
480
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540
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600
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720
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780
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840
cacctgctgg ccccggggccc acaggacatc tatgatgtgc ccccggttcg ggggctgctt
900

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cccagccagt atggccagga ggtgtatgac acacccccca tggctgtcaa gggteccaat
960
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1020
ccgtccaacc accacgcagt ctacgacgtt cctccatcgg tgagcaagga tgtgccgat
1080
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1200
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1320
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1380
gaagccccgg cagagggcaa gcgcctgtcg gcctccagca ccggcagcac acgcagcagc
1440
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1560
gacctggcag gcagcgccgg tgcgactgga ggctggcgta gcccctctga gccacaggag
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1680
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1740
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1920
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1980
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2040
tcacccccta agttcacctc ccaggactcg ccagatgggc agtacgagaa cagcgagggg
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2160
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<210> 3012

<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

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Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
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Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
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Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
			100					105					110		
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
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Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
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Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
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Leu	Leu	Arg	Glu	Glu	Thr	Tyr	Asp	Val	Pro	Pro	Ala	Phe	Ala	Lys	Ala									
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Lys	Pro	Phe	Asp	Pro	Ala	Arg	Thr	Pro	Leu	Val	Leu	Gly	Ala	Pro	Pro									
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Pro	Asp	Leu	Tyr	Asp	Val	Pro	Pro	Gly	Leu	Arg	Arg	Pro	Gly	Pro	Gly									
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Thr	Leu	Tyr	Asp	Val	Pro	Arg	Glu	Arg	Val	Leu	Pro	Pro	Glu	Val	Ala									
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Glu	Arg	Glu	Ala	Pro	Ala	Glu	Gly	Lys	Arg	Leu	Ser	Ala	Ser	Ser	Thr									
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Pro	Gly	Arg	Glu	Pro	Leu	Glu	Leu	Glu	Val	Ala	Val	Glu	Ala	Leu	Ala									
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 Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr Glu Asn Ser
 645 650 655
 Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu Gln Gly Lys
 660 665 670
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 690 695 700
 Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His Asp Leu Ala
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 Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu Gln Cys Glu
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 755 760 765
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 Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr Leu Ser
 785 790 795 800
 Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr His Tyr Ser
 805 810 815
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 820 825 830
 Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met Val Glu
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 Gly Gln Leu Ala Ala Ala
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<210> 3013

<211> 248

<212> DNA

<213> Homo sapiens

<400> 3013

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<210> 3014

<211> 82
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Val Ala Pro Pro Arg Pro Thr Val Ile Leu Leu Arg Leu Glu Gly Ala
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<210> 3015
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 <212> DNA
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 <213> Homo sapiens

<400> 3016
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 35 40 45
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

50 55 60
 Gln Leu Gly Gln Val Lys Phe Ser Cys Glu Asn Ala Ser Pro Asp Thr
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 Arg Leu Gln Ala Arg Tyr Val
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<210> 3017

<211> 4796

<212> DNA

<213> Homo sapiens

<400> 3017

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<210> 3018

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

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Thr	Thr	Pro	Thr	Pro	Thr	Leu	Ala	Cys	Pro	Ser	Pro	Gln	Cys	Ala	Phe
		20						25					30		
Gln	Arg	Trp	Ile	Thr	Ile	Gln	His	Arg	Trp	Ser	Ser	Ala	Leu	His	Cys
	35					40						45			
Gln	Gly	Leu	Thr	Pro	Thr	Pro	Gly	Ala	Leu	Pro	Asn	Tyr	Leu	Lys	Val
	50					55					60				
Lys	Ala	Asn	Arg	Ala	Ile	Pro	Gln	Ala	Val	Thr	Ser	Thr	Arg	Leu	Gly
65					70					75				80	
Thr	Thr	Lys	Pro	Pro	Cys	Thr	Ile	Thr	Pro	Pro	Cys	Arg	Ala	Val	Arg
					85				90					95	
Ser	Thr	Ser	Pro	Arg	Leu	Pro	Thr								
					100										

<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3019

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 420

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 882

<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

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			20				25					30			
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
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Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
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<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3021

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 480

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 720
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 780
 gattttgact ggagagaaga aagggtcagg agtgcagggc gggtagctgg ggagctgcgt
 840
 ggactcgcgc agacgggaag caggcgctg ctggcgggtga cctggggccg gagaggaacg
 900
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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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1				5					10					15	
Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50					55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65					70					75				80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
			85					90							

<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 120
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 180
 aatgattgaa ataataaaca tttttcttat tcaagatttc gtcatggcta ttgtaaagga
 240
 aaccctagga aaatggtgaa aacttgggca gaaaaagaaa tgaggaactt aatcaggcta
 300

aacacagcag agataccatg tccagaacca ataatgctaa gaagtcattg tcttgcctg
360
agtttcatcg gtaaagatga catgcctgca ccactcttga aaaatgtcca gttatcagaa
420
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480
gccagacttg tccatgcaga tctcagtga tttaacatgc tgtaccacgg tggaggcgtg
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tatatcattg acgtgtctca gtccgtggag caccaccacc cacatgcctt ggagttcttg
600
agaaaggatt gcgccaacgt caatgatttc tttatgaggc acagtgttgc tgtcatgact
660
gtgcgggagc tctttgaatt tgtcacagat ccatccatta cacatgagaa catggatgct
720
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780
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1020
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1080
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1140
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1200
gagaagacag ccaagacgaa aaaaggcaaa tagaatgaga accatattat gtacagtcac
1260
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1320
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1440
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1740
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1834

<210> 3024

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3024

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 1           5           10           15
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      20           25           30
Asn Leu Ile Arg Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile
      35           40           45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
      50           55           60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
      65           70           75           80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
      85           90           95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
      100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
      115          120          125
Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
      130          135          140
Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
      145          150          155          160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
      165          170          175
Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
      180          185          190
Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
      195          200          205
Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met
      210          215          220
Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln
      225          230          235          240
Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
      245          250          255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
      260          265          270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
      275          280          285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
      290          295          300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
      305          310          315          320
Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
      325          330          335
Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
      340          345

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<210> 3025

<211> 1370

<212> DNA

<213> Homo sapiens

<400> 3025

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120
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180
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240
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300
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360
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420
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480
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540
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa
600
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac
660
gatgaatttg atggctccat ctttactata cctgatgact acaaggaaga cccaagccgt
720
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780
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acacattgaa tcgacacatc agtaatacga tacagtgaag tgggcctcta ataagaattt
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cagcgagttt tctgatgtgc cattttttgt ctttttaaaa atatacatat tataaatgta
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1260
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<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
      20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
      35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
      50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
      85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
      100           105           110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
      115           120           125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
      130           135           140
Asp Pro Ser Arg Phe Pro Asp Leu
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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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120
cgcagacggc ggcctccgcg gcgctctcca gtcattggact accggcggct tctcatgagc
180
cgggtgtgccc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
240
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300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
360
tgggactggg atgaaggagt tggaaaactc gccaaagggt atgtctggaa tggaggaagc
420
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480
gacaaggtct tacggaaatt tgagaataaa attaatttag ataagctaaa tgttactgat
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660
ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
720
aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
780

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tataaaactt ctattttggt gttcaaagat cgggataaat atgtaagtgg agaattcaga
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 1020
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 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
			20					25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90					95		
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
	115						120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
	130					135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150					155				160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180					185					190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
	195					200					205				
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235				240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

```

                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
      275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
      290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
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<210> 3029
 <211> 344
 <212> DNA
 <213> Homo sapiens

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<400> 3029
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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
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344

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<210> 3030
 <211> 114
 <212> PRT
 <213> Homo sapiens

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<400> 3030
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Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
      20      25      30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
      35      40      45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
      50      55      60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65      70      75      80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
      85      90      95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
      100     105     110
Lys Asn

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<210> 3031
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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 gttggtcctg atgttattcc cctgccacac atctacggag ctccaatcaa aggtgtggaa
 180
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 240
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 300
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 360
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 420
 ccacccttga ggaccagtc gaagagtgc cctgtgctcc atccttctga ggagagagct
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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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 Val Pro Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys
 20 25 30
 Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu
 35 40 45
 Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro
 50 55 60
 Leu Asp Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln
 65 70 75 80
 Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val
 85 90 95
 Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile
 100 105 110
 Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser
 115 120 125
 Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg
 130 135 140
 Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala
 145 150 155 160
 Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu
 165 170 175
 Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

<210> 3033
 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 3033
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 120
 tactatgata aattatttaa ggaatactgc atagcagatc tcagtaaata taaagaaaat
 180
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc
 240
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 300
 tatattgagc atggtgagaa gagaaatgca cttgttaaata taaggttatg ccaagaatgt
 360
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 420
 aaaacccaaa aagactgtga agagtcatca cataaaaaat ccagattatc ttctgcagaa
 480
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 540
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 660
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 720
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg
 780
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 821

<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 20 25 30
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 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

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<400> 3035
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180
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240
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<210> 3036
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 <212> PRT
 <213> Homo sapiens

<400> 3036
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 Pro
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<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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 20 25 30
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 35 40 45
 Arg Leu Val Ala Thr Leu His Pro Cys Met Ser Asp Val Ala Glu Asp
 50 55 60
 Leu Cys Ser Met Leu Arg Gly Asp Phe Arg Phe His Val Arg Lys Lys
 65 70 75 80
 Asp Gln Ile Asn Ile Glu Thr Lys Asn Lys Thr Val Arg Phe Ile Gly
 85 90 95
 Glu Leu Thr Lys Phe Lys Met Phe Thr Lys Asn Asp Thr Leu His Cys

2263

530		535		540
Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly Glu Ser Val Lys Val				
545		550		555
His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg				560
	565		570	575
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp				
	580		585	590
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe				
	595		600	605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp				
	610		615	620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu				
625		630		635
Thr Leu Asp Ile Asn Glu Arg Gln Glu Glu Asp Tyr Gln Glu Met				640
	645		650	655
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu				
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<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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660
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720
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780

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<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
			35				40					45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65					70					75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

	85		90		95
Leu Arg Gln	Leu Gln Thr Asp	Leu Arg Lys Glu	Lys Gln Asp	Lys Ala	
	100	105	110		
Gly Leu Gln	Ala Glu Val Gln His	Leu Arg Gln Asp	Asn Met Arg	Leu	
	115	120	125		
Gln Glu Glu	Ser Gln Thr Ala Thr	Ala Gln Leu Arg	Lys Leu		
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<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
			20					25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
	35						40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55				60					
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75						80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
			85					90						95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100					105						110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115					120						125		
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
	130					135					140				
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150					155					160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
			165						170					175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
			180					185						190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
		195					200					205			
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
	210					215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225					230					235					240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
			245						250					255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
			260				265						270		
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

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Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
      290              295              300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
      305              310              315              320
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
      325              330              335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser
      340              345              350
Val Pro Glu Pro Arg Ile Ile Met
      355              360

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<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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240
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300
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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

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      20              25              30
Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
      35              40              45
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
      50              55              60
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
      65              70              75              80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
      85              90              95
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
      100              105              110
Lys Glu Ile

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115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 aacattgaaa agtggcctga caatggtagg gaaagtggg actcagctga caggcacact
 300
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 360
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 420
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 480
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<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Lys	Leu	Glu	His	Val
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Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser
		20					25					30		Lys
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala
		35				40						45		Val
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala
		50				55					60			Ser
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met
65				70					75				80	Asn
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu
			85					90					95	Ile
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly
			100				105						110	Glu
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu					
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<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55					60				
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115				120						125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
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<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
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 180

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 420
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 600
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 720
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 780
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10					15		
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
		20					25					30			
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
	35					40				45					
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55				60					

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 180
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 300

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480
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720
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1920

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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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		20						25				30			
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40				45				
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50				55				60						
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65			70					75				80			
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
		85						90				95			
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
	100							105				110			
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115						120				125				
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	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145			150					155				160			
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
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<400> 3055
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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55					60				
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65				70					75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85					90						95	
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100					105					110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
		115					120						125		
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
		130				135						140			
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150					155				160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165					170						175	
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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Ser	Val	Pro													
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

<400> 3057
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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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		20						25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
		35				40					45				
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
	50				55					60					
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65				70					75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
		85						90					95		
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
		100						105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
	115					120						125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
	130				135						140				
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145				150					155					160	
Ile	Leu	His	Cys	Arg	Val	Leu	His	Val	Asp	Tyr	Ala	Leu	Lys	Val	Cys
		165						170					175		
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		180						185					190		
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

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Glu Arg Pro Glu Ala Pro Pro Glu Tyr Ser Glu Val Val Ala Asp Thr		
225	230	235
Glu Glu Ala Ala Leu Gly Gln Ser Pro Phe Pro Leu Pro Gln Asp Pro		
245	250	255
Asp Met Ser Leu Glu Gly Pro Phe Phe Ala Tyr Ile Gln Glu Phe Arg		
260	265	270
Tyr Arg Pro Pro Pro Leu Tyr Ser Glu Glu Asp Pro Asn Pro Leu Leu		
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser	
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Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
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Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
			100					105					110		
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Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys
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			180					185					190		
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			210			215					220				
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				245				250						255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala

	260		265		270										
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	290					295					300				
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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1140

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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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Phe	Lys	Met	Leu	Gln	Glu	Asn	Arg	Glu	Gly	Arg	Ala	Ala	Pro	Arg	Gln
		20						25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
		35					40					45			
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
		50				55					60				
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
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Glu	Lys	Cys	Ser	Thr	Ser	Ile	Ala	Asn	Gln	Ala	Val	Arg	Ile	Gln	Glu
				85					90				95		
Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
				100				105					110		
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
		115					120					125			
Glu	Lys	His	Ala	Arg	Gln	Arg	Tyr	Ser	Ala	Pro	Ala	Thr	Leu	Ser	Ser
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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<210> 3064

<211> 128

<212> PRP

<213> Homo sapiens

<400> 3064

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
			35					40				45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55					60				
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
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				85				90						95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

<400> 3066
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35 40 45
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
85 90 95
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Asn
100 105 110
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
115 120 125
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys
130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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<210> 3067
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<212> DNA
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<210> 3068
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 3068
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 35 40 45
 Arg Glu Pro Thr Ala Gly Ser Pro Pro Cys Ser Leu Pro Arg Pro Asp
 50 55 60
 Leu Gln Pro Pro Ser Thr Pro Pro Pro Val His Lys Glu Gln Lys
 65 70 75 80
 Lys Ser Asp Pro Pro Pro Pro Pro Gly Lys Phe Lys Ser Phe Leu
 85 90 95
 Pro Pro Arg Ser Pro Gly Asn Ser Ala Leu Gly Pro Arg Arg Gly Trp
 100 105 110
 Gly Trp Ile Ala Ala Gly Gly Ala Pro Ala Met Pro Arg Pro Pro Ser
 115 120 125
 Gly Ala Gly Asp Arg Glu Ile Pro Arg Asp Leu Ala Cys Ala Pro Tyr
 130 135 140
 Pro Pro Pro Gly Ala Gly Arg Gly Ser Glu His Arg Ser Ala Pro Gly
 145 150 155 160
 Arg Arg Cys Gly Ser Lys Glu Pro Glu Ala Ala Ser Arg Pro Pro
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 180 185 190
 Pro Ser Pro Ala Pro Pro Pro Arg Gly Glu Trp Gly
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<210> 3069
 <211> 1561
 <212> DNA
 <213> Homo sapiens

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 180

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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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      35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
      50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
      65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
      85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
      100           105           110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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		20					25					30			
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
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Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
	50				55				60						
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
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Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

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Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
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Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
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Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
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			85						90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105					110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
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Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
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Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
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Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
		195				200						205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230					235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
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Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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 <212> DNA
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<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu
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Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly
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Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser
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			85					90					95		
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu
		100					105					110			
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Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala
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Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu
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Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro
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Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp
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Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr
	210				215					220					
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe
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Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala
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His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln
		260					265					270			
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<210> 3079

<211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<210> 3080
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<212> PRT
<213> Homo sapiens
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 340 345 350
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
 355 360 365
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
 370 375 380
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
 385 390 395 400
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
 405 410 415
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
 420 425 430
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
 435 440 445
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
 450 455 460
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
 465 470 475 480
 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly
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 Gly Arg Ser Val
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<210> 3081
 <211> 1902
 <212> DNA
 <213> Homo sapiens

<400> 3081
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 240
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 720
 ttctgggagc tggacacgga ccacgacctg ctcacgacg cgagcagcct ggcgcggcac
 780
 aatgaccacg ccctttctac caagatgata gacaggatct tctcaggagc agtcacacga
 840
 ggcagaaaag tgcagaagga agggaagatc agctatgccg actttgtctg gtttttgatc
 900
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 960
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 1020
 aggctggaca gcatggccat cgaggccctg cccttcagg actgcctctg ccagatgctg
 1080
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 1140
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 1260
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 1380
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 1440
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 1500
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 1560
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 1680
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 1740
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 1800
 accggcggtt cccgggagcc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat
 1860
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 1902

<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr
 1 5 10 15
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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      20      25      30
Val Ser Val His Lys Phe Val Ala Met Trp Arg Lys Ile Leu Gln Asn
      35      40      45
Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly
      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
      405      410

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<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

<400> 3083
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 180
 agcatccccg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg
 240
 cgggtcaatc tgcctagggt cctgtccatg cccccgtgg ctggcaccgc gtgccatgca
 300
 tacgaccggg aggtccacct gcgttgtgag ctctcaccgg gctactacct ggctgtcccc
 360
 agcaccttcc tgaaggacgc gccaggggag ttctgtctcc gactcttctc taccgggcga
 420
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt
 480
 ccaaggcagg atttgggcac tttccctctg tggttggcag gtgtccatgt gggaactgag
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 gcagtggcca
 610

<210> 3084
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 3084
 Xaa Arg Pro Ser Cys Trp Glu Pro Val Arg Pro Ser Gly Ser Ser His
 1 5 10 15
 Leu Ser Trp His Arg Gly Pro Pro Cys Glu Val Tyr Ile Ala Val Leu
 20 25 30
 Gln Arg Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala
 35 40 45
 Leu Val Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly
 50 55 60
 Lys His Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg
 65 70 75 80
 Arg Val Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr
 85 90 95
 Ala Cys His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser
 100 105 110
 Pro Gly Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro
 115 120 125
 Gly Glu Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg
 130 135 140

<210> 3085
 <211> 1080
 <212> DNA
 <213> Homo sapiens

<400> 3085
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 120
 caaaagataa gaaaatggaa attaagggaa atctgttcag caacaaagat cttgaggaat
 180
 tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
 240
 agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat
 300
 ctgacggagt tatttattca attagaacaa atgggtgtgct tctatttata ccaagggttg
 360
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 420
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 480
 ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat
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 ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac
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 tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgccaagaa gtcaaagtaa
 720
 acatcattca ggaggaatat caagaatatc gccaaacaaa gggaaggagc ctatacacac
 780
 ttctagagga gatacgggac ctagctctcc tggatgtttc aaacaattat ggaatatgag
 840
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 900
 catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat
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 1020
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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

Met	Cys	Val	Thr	Gln	Cys	Ser	Ser	Arg	Ser	Gly	Leu	Gly	Ser	Tyr	Phe
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Ala	Tyr	Met	Xaa	Asn	Val	Leu	Ser	Arg	Ala	Arg	Trp	Leu	Thr	Pro	Val
		20						25					30		
Thr	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu
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Ile	Glu	Thr	Ile	Leu	Ala	Asn	Thr	Val	Lys						
		50					55								

<210> 3087
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 3087
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1380
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1440

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 1560
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 2329

<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

Xaa Glu Lys His Leu Asp Asp Glu Glu Arg Arg Lys Arg Lys Glu Glu
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 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Asp
 35 40 45
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr
 50 55 60
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys
 65 70 75 80
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro
 85 90 95
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys
 100 105 110
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala
 115 120 125
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130 135 140
 Thr Val Tyr Tyr Lys Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys
 145 150 155 160
 Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val
 165 170 175
 Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys
 180 185 190
 Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro
 195 200 205
 Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val
 210 215 220
 Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn
 225 230 235 240
 Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp
 245 250 255
 Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp
 260 265 270
 Glu Glu Glu Thr His Pro Val Thr
 275 280

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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 120
 gcccttacaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
 180
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 240
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 420
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 480
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 720
 ca
 722

<210> 3090

<211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3090

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Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
      20           25           30
Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
      35           40           45
Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
      50           55           60
Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
      65           70           75           80
Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
      85           90           95
Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
      100          105          110
Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser
      115          120          125
Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
      130          135          140
Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
      145          150          155          160
Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
      165          170          175
Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
      180          185          190
Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
      195          200          205
Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
      210          215          220
Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
      225          230          235          240

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<210> 3091
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 3091

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cccagggcga ccccttctgc caagtgtccc aaaatgattg ctaaattgct ggctccccc
 180
ctctttgact ccattctctg gttccctctt tctgctgcca gtcctcccgga ctcttccctg
 240
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ttccataccc atccctgctt cctgctcgg ccg
 333

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<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
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 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
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 Phe Pro Ser Ala Pro Phe Thr Arg
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<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3093
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 180
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 240
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 300
 ccgccactcc ctgaccaggt ggatcatcaag acacagacag aataccagct gtccctccca
 360
 gaccagcaga atttcctga cctggagggc cagaggctga actgcagcca cccagaggaa
 420
 gggcgagcgc tgcccaccgc acggatgac gccttcgcca tggcgctact gggctgcgtg
 480
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<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094

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          20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Leu Pro Asp Gln Val Val Ile
          35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
          50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
          85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
          100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
          115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
          130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
          165          170          175
Lys Gly Pro
  
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<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095

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<213> Homo sapiens

<400> 3098

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Met	Gly	Leu	His	Ser	Asn	Gly	Leu	Asp	Asp	Arg	Ser	Lys	Leu	Glu
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Gln	Glu	Val	Ser	Glu	Ile	Leu	Met	Ala	Phe	Gly	Ile	Pro	Pro	Glu
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2314

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Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
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Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
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Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1055
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Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1070
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Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1120
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Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
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Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
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His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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<210> 3100
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 <212> PRT
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	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
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Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
	115	120
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
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<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 3102

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Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
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Phe	Phe	Gly	Leu	Thr	Glu	Phe	Gln	Arg	Lys	Thr	Gln	Tyr	Leu	Phe	Glu
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Arg	Thr	Phe	Asn	Leu	Lys	Phe	Ile	Arg	Pro	Phe	Met	Gln	Tyr	Asn	Ser
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Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
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Leu	Phe	Gln	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu
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Gln	Arg	Leu	Arg	Ser	Arg	Glu	Glu	Arg	Leu	Leu	His	Arg	Ala	Lys	Glu

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 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
 50 55 60
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
 65 70 75 80
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
 85 90 95
 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
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<211> 1366

<212> PRT

<213> Homo sapiens

<400> 3106

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Pro	Ala	Phe	Ser	Ser	Asp	Ser	Arg	Pro	Phe	Met	Ser	Ser	Ala	Ser	Phe
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Leu	Gly	Ser	Gln	Pro	Cys	Pro	Asp	Thr	Ser	Tyr	Ala	Pro	Val	Ala	Thr
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His	Asp	Lys	Leu	Phe	Gln	Leu	Ser	Arg	Pro	Phe	Ala	Gly	Phe	Glu	Asp														
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705	710	715
Lys Val Arg Arg Leu Gly Arg Glu Leu Pro Val Asn Thr Leu Asp Glu		
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Leu Ile Asp Gln Leu Gly Gly Pro Gln Arg Val Ala Glu Met Thr Gly		
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Ser Arg Ala Glu Gln Gly Leu Ser Ile Asp His Val Asn Leu Arg Glu		
770	775	780
Lys Gln Arg Phe Met Ser Gly Glu Lys Leu Val Ala Ile Ile Ser Glu		
785	790	795
Ala Ser Ser Ser Gly Val Ser Leu Gln Ala Asp Arg Arg Val Gln Asn		
805	810	815
Gln Arg Arg Arg Val His Met Thr Leu Glu Leu Pro Trp Ser Ala Asp		
820	825	830
Arg Ala Ile Gln Gln Phe Gly Arg Thr His Arg Ser Asn Gln Val Ser		
835	840	845
Ala Pro Glu Tyr Val Phe Leu Ile Ser Glu Leu Ala Gly Glu Arg Arg		
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Phe Ala Ser Ile Val Ala Lys Arg Leu Glu Ser Leu Gly Ala Leu Thr		
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His Gly Asp Arg Arg Ala Thr Glu Ser Arg Asp Leu Ser Lys Tyr Asn		
885	890	895
Phe Glu Asn Lys Tyr Gly Thr Arg Ala Leu His Cys Val Leu Thr Thr		
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Ile Leu Ser Gln Thr Glu Asn Lys Val Pro Val Pro Gln Gly Tyr Pro		
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Gly Gly Val Pro Thr Phe Phe Arg Asp Met Lys Gln Gly Leu Leu Ser		
930	935	940
Val Gly Ile Gly Gly Arg Glu Ser Arg Asn Gly Cys Leu Asp Val Glu		

945		950		955		960
Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu						
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Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp						
	980			985		990
His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile						
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Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln						
	1010			1015		1020
Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr						
	1025			1030		1035
Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys						
	1045			1050		1055
Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys						
	1060			1065		1070
Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly						
	1075			1080		1085
Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu						
	1090			1095		1100
Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu						
	1105			1110		1115
Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His						
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Cys Ser His Ser Ala Trp Asn Arg His Cys Arg Leu Ala Gln Glu Gly						
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Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys						
	1155			1160		1165
Gly Ala Leu Leu Arg Val Trp Gly Arg Ile Ala Ala Val Met Ala Asp						
	1170			1175		1180
Val Ser Ser Ser Ser Tyr Leu Gln Ile Val Arg Leu Lys Thr Lys Asp						
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Arg Lys Lys Gln Val Gly Ile Lys Ile Pro Glu Gly Cys Val Arg Arg						
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Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln						
	1220			1225		1230
Ala Pro Ala Leu Gly Cys Pro Ala Pro Pro Ala Pro Arg Pro Leu Ala						
	1235			1240		1245
Leu Pro Cys Gly Pro Gly Glu Val Leu Asp Leu Thr Tyr Ser Pro Pro						
	1250			1255		1260
Ala Glu Ala Phe Pro Pro Pro Pro His Phe Ser Phe Pro Ala Pro Leu						
	1265			1270		1275
Ser Leu Asp Ala Gly Pro Gly Val Val Pro Leu Gly Thr Pro Asp Ala						
	1285			1290		1295
Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe						
	1300			1305		1310
Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro						
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Ser Glu Gly Ala Leu Gly Glu Gly Ala Gly Ala Gly Ala Ala Gly						
	1330			1335		1340
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<211> 2102
<212> DNA
<213> Homo sapiens

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<210> 3108

<211> 517

<212> PRT

<213> Homo sapiens

<400> 3108

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			20					25				30			
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35				40					45				
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
	50				55					60					
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65				70				75					80		
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
		85				90					95				
Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
		100				105					110				
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
	115					120					125				
Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
	130					135					140				
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
145				150				155						160	
Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
			165					170					175		
Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

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Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn
      195      200      205
Phe Ile His Leu Ile Leu Glu Ala Leu Val Asp Gly Pro Arg Met Gln
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Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly
225      230      235      240
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg
      245      250      255
Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val
      260      265      270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn
      275      280      285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg
      290      295      300
Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile
305      310      315      320
Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu
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Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu
      340      345      350
Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu
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Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu
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Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala
385      390      395      400
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg
      405      410      415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His
      420      425      430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala
      435      440      445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp
      450      455      460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp
465      470      475      480
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser
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Pro Arg Asp Glu Leu
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<210> 3109

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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120

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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
			35				40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
			50				55				60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105					110			
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
			115				120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
			130				135					140			
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

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Ile	Lys	Ser	Val	Ala	Trp	Gly
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Ser	Tyr	Asp	Gly	Lys	Val	Arg
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<210> 3111

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 3111

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 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
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 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
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 <212> DNA
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<210> 3114
 <211> 210
 <212> PRT
 <213> Homo sapiens

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 50 55 60
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 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
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 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
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 165 170 175
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 180 185 190
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 Phe Glu
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 <211> 1366
 <212> DNA
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<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

Met	Glu	Lys	Arg	Thr	Cys	Ala	Leu	Cys	Pro	Lys	Asp	Val	Glu	Tyr	Asn
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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
			35				40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
	180	185
		190

<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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 300
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 420
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 480
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 1260
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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
			35				40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
			50			55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65				70					75					80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85				90						95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
			115				120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
			130			135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150				155					160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165				170						175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
			195			200					205				
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
			210			215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230				235					240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

	245		250		255
Asp Gly Phe	Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu				
	260		265		270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser					
	275		280		285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr					
	290		295		300
Leu Leu Ala Val Ala Lys Ser Gln					
305		310			

<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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120
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180
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240
tacaccacct tccaagccac cccaacgctc attcccacgg agacggcagc tctatacccc
300
tcttcagcac tgctcccagc tgccagggtg cctgctgccc ccaccctgt tgcttactat
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427

<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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	20 25 30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser	
	35 40 45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser	
	50 55 60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr	
65	70 75 80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala	
	85 90 95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala	
	100 105 110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr	

115 120 125
 Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala
 130 135 140

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

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 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgctaata
 180
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 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
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 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

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 120
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atcgagtc ccaagttcaa acagaggaag ggggagtcg acggggccta tatccaccgc
 240

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 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
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 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
 65 70 75 80
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
 85 90

<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

<400> 3125
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 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
 180
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 240
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc
 300
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 360
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 420
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 480
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 540
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<210> 3126

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3126

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Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu
          20             25             30
His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
      35             40             45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50             55             60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
65             70             75             80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
          85             90             95
Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
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Cys Asp Val Pro
          115

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<210> 3127

<211> 2218

<212> DNA

<213> Homo sapiens

<400> 3127

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120
actttggaga aattgaagag cctagggctt tttgggctgc aagtcccaga agaataatggt
180
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360
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420
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660
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720
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780

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2218

<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
 35 40 45
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
 50 55 60
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
 65 70 75 80
 Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
 85 90 95
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
 100 105 110
 Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
 115 120 125
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
 130 135 140
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
 145 150 155 160
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
 165 170 175
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
 180 185 190
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
 195 200 205
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
 210 215 220
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
 225 230 235 240
 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
 245 250 255
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
 260 265 270
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
 275 280 285
 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
 290 295 300
 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
 305 310 315 320
 Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln
 325 330 335
 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg
 340 345 350
 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
 355 360 365
 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
 370 375 380
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
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 Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
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 Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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<400> 3129
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840

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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 Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp Val Pro Ala
 35 40 45
 Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val Ile Gly Phe Phe
 50 55 60
 Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu His Ser Met Val Gln

65					70					75				80	
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
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Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
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Gln	Ile	His	Leu	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu
			165					170					175		
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
			180					185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
		195					200					205			
Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
	210					215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
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Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
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<210> 3131

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 3131

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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
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			100					105					110		
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Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
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Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu
      180              185              190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
      195              200              205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
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Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
225              230              235              240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
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<210> 3133

<211> 621

<212> DNA

<213> Homo sapiens

<400> 3133

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<210> 3134

<211> 51

<212> PRT

<213> Homo sapiens

<400> 3134

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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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<210> 3136

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3136

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			20					25					30		
Lys	Cys	Pro	Ile	Cys	Gln	Thr	Val	Lys	Ala	Asn	Gln	Leu	Glu	Leu	Glu
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			115				120					125			
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<210> 3138

<211> 977

<212> PRT

<213> Homo sapiens

<400> 3138

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Tyr	Leu	Pro	Pro	Val	Asp	Ser	Arg	Ser	Ser	Ser	Gly	Phe	Val	Gly	Leu	
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Arg	Asn	Gly	Gly	Ala	Thr	Cys	Tyr	Met	Asn	Ala	Val	Phe	Gln	Gln	Leu	
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Tyr	Met	Gln	Pro	Gly	Leu	Pro	Glu	Ser	Leu	Leu	Ser	Val	Asp	Asp	Asp	
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Thr	Asp	Asn	Pro	Asp	Asp	Ser	Val	Phe	Tyr	Gln	Val	Gln	Ser	Leu	Phe	
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Gly	His	Leu	Met	Glu	Ser	Lys	Leu	Gln	Tyr	Tyr	Val	Pro	Glu	Asn	Phe	
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Trp	Lys	Ile	Phe	Lys	Met	Trp	Asn	Lys	Glu	Leu	Tyr	Val	Arg	Glu	Gln	
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Tyr	Leu	Lys	Lys	Met	Gly	Arg	Asp	Gln	Ile	Phe	Lys	Asn	Thr	Phe	Gln	
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Glu	Arg	Glu	Glu	Ala	Phe	Met	Ala	Leu	Asn	Leu	Gly	Val	Thr	Ser	Cys	
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His	Leu	Met	Arg	Phe	Gly	Phe	Asp	Trp	Glu	Ser	Gly	Arg	Ser	Ile	Lys	
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Tyr	Asp	Glu	Gln	Ile	Arg	Phe	Pro	Trp	Met	Leu	Asn	Met	Glu	Pro	Tyr	
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Thr	Val	Ser	Gly	Met	Ala	Arg	Gln	Asp	Ser	Ser	Ser	Glu	Val	Gly	Glu	
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Asn	Gly	Arg	Ser	Val	Asp	Gln	Gly	Gly	Gly	Gly	Ser	Pro	Arg	Lys	Lys	
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Val	Ala	Leu	Thr	Glu	Asn	Tyr	Glu	Leu	Val	Gly	Val	Ile	Val	His	Ser	
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Gly	Cys	Gly	Lys	Gly	Lys	Trp	Tyr	Lys	Phe	Asn	Asp	Thr	Val	Ile	Glu	
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Asn Leu Lys Phe Met Lys Asn Arg Asp Val Tyr Ser Ser Asp Tyr Phe				480
	485		490	495
Ser Phe Val Leu Ser Leu Ala Ser Leu Asn Ala Thr Lys Leu Lys His				
	500		505	510
Pro Tyr Tyr Pro Cys Met Ala Lys Val Ser Leu Gln Leu Ala Ile Gln				
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Phe Leu Phe Gln Thr Tyr Leu Arg Thr Lys Lys Lys Leu Arg Val Asp				
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Thr Glu Glu Trp Ile Ala Thr Ile Glu Ala Leu Leu Ser Lys Ser Phe				
545		550		555
Asp Ala Cys Gln Trp Leu Val Glu Tyr Phe Ile Ser Ser Glu Gly Arg				560
565		570		575
Glu Leu Ile Lys Ile Phe Leu Leu Glu Cys Asn Val Arg Glu Val Arg				
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Val Ala Val Ala Thr Ile Leu Glu Lys Thr Leu Asp Ser Ala Leu Phe				
	595		600	605
Tyr Gln Asp Lys Leu Lys Ser Leu His Gln Leu Leu Glu Val Leu Leu				
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Ala Leu Leu Asp Lys Asp Val Pro Glu Asn Cys Lys Asn Cys Ala Gln				
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Tyr Phe Phe Leu Phe Asn Thr Phe Val Gln Lys Gln Gly Ile Arg Ala				
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Gly Asp Leu Leu Arg His Ser Ala Leu Arg His Met Ile Ser Phe				
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Leu Leu Gly Ala Ser Arg Gln Asn Asn Gln Ile Arg Arg Trp Ser Ser				
	675		680	685
Ala Gln Ala Arg Glu Phe Gly Asn Leu His Asn Thr Val Ala Leu Leu				
	690		695	700
Val Leu His Ser Asp Val Ser Ser Gln Arg Asn Val Ala Pro Gly Ile				
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Phe Lys Gln Arg Pro Pro Ile Ser Ile Ala Pro Ser Ser Pro Leu Leu				
	725		730	735
Pro Leu His Glu Glu Val Glu Ala Leu Leu Phe Met Ser Glu Gly Lys				
	740		745	750
Pro Tyr Leu Leu Glu Val Met Phe Ala Leu Arg Glu Leu Thr Gly Ser				
	755		760	765
Leu Leu Ala Leu Ile Glu Met Val Val Tyr Cys Cys Phe Cys Asn Glu				
	770		775	780
His Phe Ser Phe Thr Met Leu His Phe Ile Lys Asn Gln Leu Glu Thr				
785		790		795
Ala Pro Pro His Glu Leu Lys Asn Thr Phe Gln Leu Leu His Glu Ile				
	805		810	815
Leu Val Ile Glu Asp Pro Ile Gln Ala Glu Arg Val Lys Phe Val Phe				
	820		825	830
Glu Thr Glu Asn Gly Leu Leu Ala Leu Met His His Ser Asn His Val				
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Asp Ser Ser Arg Cys Tyr Gln Cys Val Lys Phe Leu Val Thr Leu Ala				
	850		855	860
Gln Lys Cys Pro Ala Ala Lys Glu Tyr Phe Lys Glu Asn Ser His His				
865		870		875
Trp Ser Trp Ala Val Gln Trp Leu Gln Lys Lys Met Ser Glu His Tyr				880

885 890 895
 Trp Thr Pro Gln Ser Asn Val Ser Asn Glu Thr Ser Thr Gly Lys Thr
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 Phe Gln Arg Thr Ile Ser Ala Gln Asp Ala Leu Ala Tyr Ala Thr Ala
 915 920 925
 Leu Leu Asn Glu Lys Glu Gln Ser Gly Ser Ser Asn Gly Ser Glu Ser
 930 935 940
 Ser Pro Ala Asn Glu Asn Gly Asp Arg His Leu Gln Gln Gly Ser Glu
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<210> 3139
 <211> 503
 <212> DNA
 <213> Homo sapiens

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<210> 3140
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 3140
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 Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe
 35 40 45
 Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro
 50 55 60
 Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

65					70					75					80
Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu	Arg	Phe
				85					90				95		
Ile	Ile	Tyr	Ala	Phe	Pro	Met	Leu	Asn	Ile	Thr	Ala	Ala	Arg	Gly	Cys
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<210> 3141

<211> 1815

<212> DNA

<213> Homo sapiens

<400> 3141

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<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
	35					40					45				
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
	50				55					60					
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65			70						75					80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
		85						90					95		
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
	100						105					110			
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
	115				120							125			
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
	130				135						140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145			150						155					160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
		165						170					175		
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
	180						185					190			
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His	Ile Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn Gln Leu Val Ser Thr Ile Met Ser Ala Ser Thr		
225	230	235
Thr Thr Leu Arg Tyr Pro Gly Tyr Met Asn Asn Asp Leu Ile Gly Leu		
245	250	255
Ile Ala Ser Leu Ile Pro Thr Pro Arg Leu His Phe Leu Met Thr Gly		
260	265	270
Tyr Thr Pro Leu Thr Thr Asp Gln Ser Val Ala Ser Val Arg Lys Thr		
275	280	285
Thr Val Leu Asp Val Met Arg Arg Leu Leu Gln Pro Lys Asn Val Met		
290	295	300
Val Ser Thr Gly Arg Asp Arg Gln Thr Asn His Cys Tyr Ile Ala Ile		
305	310	315
Leu Asn Ile Ile Gln Gly Glu Val Asp Pro Thr Gln Val His Lys Ser		
325	330	335
Leu Gln Arg Ile Arg Glu Arg Lys Leu Ala Asn Phe Ile Pro Trp Gly		
340	345	350
Pro Ala Ser Ile Gln Val Ala Leu Ser Arg Lys Ser Pro Tyr Leu Pro		
355	360	365
Ser Ala His Arg Val Ser Gly Leu Met Met Ala Asn His Thr Ser Ile		
370	375	380
Ser Ser Leu Phe Glu Arg Thr Cys Arg Gln Tyr Asp Lys Leu Arg Lys		
385	390	395
Arg Glu Ala Phe Leu Glu Gln Phe Arg Lys Glu Asp Met Phe Lys Asp		
405	410	415
Asn Phe Asp Glu Met Asp Thr Ser Arg Glu Ile Val Gln Gln Leu Ile		
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Gln Glu Gln		
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<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

<400> 3144
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 35 40 45
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 50 55 60
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
 65 70 75 80
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<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 3145
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 180
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<210> 3146
 <211> 131
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

50 55 60
 Leu Val Cys Gln Thr Leu Gln Pro Pro Ala Ser Gly His Ser Ala Arg
 65 70 75 80
 Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg
 85 90 95
 Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro
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 Pro Asn Val Val Ser Ser Arg Arg Arg Leu Thr Pro Arg Arg Gly Trp
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 Gly Thr Ser
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
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Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Glu
			405					410						415	
Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg	Ser	Leu	Lys	Lys
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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720

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<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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	50				55					60					
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		115				120					125				
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
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Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
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Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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<211> 65

<212> PRT

<213> Homo sapiens

<400> 3154

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
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Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
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<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
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<212> DNA
<213> Homo sapiens

<400> 3159
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2040
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2400

tgccatta
2408

<210> 3160
<211> 431
<212> PRT
<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75				80	
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85					90					95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
			100					105					110		
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
	115					120						125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
	130					135					140				
Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
145					150					155				160	
Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
				165					170					175	
Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
			180					185					190		
Gly	Gln	Ile	Trp	Pro	Lys	Ala	Val	Tyr	Leu	Val	Cys	Asn	Tyr	Ser	Pro
	195					200						205			
Lys	Gly	Asn	Trp	Trp	Gly	His	Ala	Pro	Tyr	Lys	His	Gly	Arg	Pro	Cys
	210					215					220				
Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys
225					230					235				240	
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
				245					250					255	
Asn	Glu	Ile	Glu	Arg	Gln	Gln	Ser	Gln	Val	His	Asp	Thr	His	Val	Arg
			260					265					270		
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
	275					280						285			
Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
	290					295					300				
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
305					310					315				320	
Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
				325					330					335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
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Val	Asp	Ile	Thr	Arg	Gln	Gly	Arg	Lys	His	Tyr	Phe	Ile	Lys	Ser	Asn

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<400> 3161
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120
ctcaacttgc taaaaatcaa gcatggcgat ttgttggtcc tgtttccctc gagccttgct
180
gggcccctcat ctgaaatgga gacgtcagtt ccaccgggct tcaaagtctt tggcgctccc
240
aacgtggtgg aggatgagat tgatcagtac ctcagcaaac aggacgggaa gatttacaga
300
agccgagacc cacagctatg ccgccacggc cctttgggga aatgcgtgca ctgcgtccct
360
ctagagccat tcgatgagga ctatctaaac catctcgagc ctcccgtgaa gcacatgtcc
420
ttccacgcct acatccggaa gctgactgga ggggctgaca aggggaagtt tgttgccctg
480
gagaacatca gctgcaagat taagtcaggg tgcgaggggc acctcccgtg gccgaatggc
540
atctgtacta agtgccagcc gagcgccatc acgctgaaca gacagaagta caggcatgtg
600
gacaatatca tgtttgagaa tcacaccgtc gctgaccgct ttcttgactt ctggagaaaag
660
acaggaacc agcatttttg gtacttatac ggacgggtaca cggagcacia agacattccc
720
cttggcatca gggctgaagt ggctgcgatt tatgagccac ctcagattgg tacacagaac
780
agcttgagc ttcttgagga tccaaaagct gaagtggctg atgaaattgc tgccaaactt
840
ggcctgcgga aggttggtg gatatttaca gacctcgtct cagaagatac ccgaaagggg
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accgtccgct acagtcgaaa taaggacacc tatttcctaa gttcagaaga gtgcatcact
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gcaggagact tccagaacaa gcatcccaac atgtgccggc tctctccaga cggacatttt
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ggatccaagt ttgttactgc agtggctaca ggtggctctg acaaccaagt ccactttgaa
1080
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1140

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<400>	3162														
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Gln	Asn	Asn	Gly	Phe	Ser	Val	Asn	Ile	Asn	Arg	Asn	Lys	Thr	Gly	Glu
			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
		35					40					45			
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
	50					55					60				
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
65					70					75					80
Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
				85					90					95	
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
			100					105					110		
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr
		115					120					125			
Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
	130						135					140			
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu
145					150					155					160
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro
				165					170					175	
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
			180					185					190		
Asn	Arg	Gln	Lys	Tyr	Arg	His	Val	Asp	Asn	Ile	Met	Phe	Glu	Asn	His
		195					200					205			
Thr	Val	Ala	Asp	Arg	Phe	Leu	Asp	Phe	Trp	Arg	Lys	Thr	Gly	Asn	Gln
	210					215					220				
His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro
225					230					235					240
Leu	Gly	Ile	Arg	Ala	Glu	Val	Ala	Ala	Ile	Tyr	Glu	Pro	Pro	Gln	Ile
				245					250					255	
Gly	Thr	Gln	Asn	Ser	Leu	Glu	Leu	Leu	Glu	Asp	Pro	Lys	Ala	Glu	Val
			260					265					270		
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
		275					280					285			
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
		290				295					300				
Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
305					310					315					320
Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
				325					330					335	
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
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355                               360                               365
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Val Cys
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<210> 3163
<211> 1075
<212> DNA
<213> Homo sapiens

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120
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180
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240
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360
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420
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480
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600
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720
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960
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1075

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<210> 3164
<211> 94
<212> PRT
<213> Homo sapiens
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<400> 3164

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His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
          20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
          85           90

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<210> 3165

<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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720
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900
gagaaattta ggtatttacc taaggccatt aaggcgtgga ataaccgctc cccacgtgta
960
gaatgtgtcc tggcagagct caagggcggt acatgcgaga acagggaggc tgtgctggat
1020

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gcttttctgg atgatggctt ccttggtccc acatttgaac agttggcagc tttgcagata
1080
gaatatgaag aaaacgtgga cttgaatgac gtcctgggtgc caaagccgtt ctctcagttc
1140
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1320
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1440
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1620
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1680
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1980
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2220
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2280
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<210> 3166

<211> 717

<212> PRT

<213> Homo sapiens

<400> 3166

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      20           25           30
Ser Leu Pro Leu Ser Ala His Gly Ile Val Val Ala Trp Leu Ser Arg
      35           40           45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
      50           55           60
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
65           70           75           80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
      85           90           95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
      100          105          110
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
      115          120          125
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
      130          135          140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
145          150          155          160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
      165          170          175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
      180          185          190
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu
      195          200          205
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
      210          215          220
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
225          230          235          240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
      245          250          255
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
      260          265          270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
      275          280          285
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
      290          295          300
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
305          310          315          320
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
      325          330          335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
      340          345          350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
      355          360          365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
      370          375          380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
385          390          395          400
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr
      405          410          415
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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<210> 3167
<211> 2730
<212> DNA
<213> Homo sapiens
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120
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Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
          115          120          125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
          130          135          140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
          145          150          155          160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
          165          170          175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
          180          185          190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
          195          200          205
Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
          225

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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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420

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<210> 3174
 <211> 152
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
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 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
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 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
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 Glu Met Ala His Val Thr Gly Arg
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<210> 3175
 <211> 948
 <212> DNA
 <213> Homo sapiens

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<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

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Ala	Leu	Leu	Gly	Gly	Arg	Trp	Leu	Gln	Pro	Arg	Ala	Trp	Leu	Gly	Phe
			20					25					30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
	50					55				60					
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
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<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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1857

<210> 3178

<211> 273
 <212> PRT
 <213> Homo sapiens

<400> 3178

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      35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
      50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
      65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
      85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
      100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
      115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
      130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
      145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
      165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
      180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
      195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
      210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
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Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
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<210> 3179
 <211> 3447
 <212> DNA
 <213> Homo sapiens

<400> 3179

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<211> 127
<212> PRT
<213> Homo sapiens

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35 40 45
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn
50 55 60
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
65 70 75 80
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe
85 90 95
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr
100 105 110
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln
115 120 125

<210> 3181
<211> 287
<212> DNA
<213> Homo sapiens

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<210> 3182
<211> 95
<212> PRT
<213> Homo sapiens

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Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

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Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln	
	50					55					60					
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys	
65					70					75					80	
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 1457

<210> 3184
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 3184
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 35 40 45
 Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala Gln
 50 55 60
 Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys Asn
 65 70 75 80
 Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala Gln
 85 90 95
 Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro Cys
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 115 120 125
 Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr
 130 135 140

<210> 3185
 <211> 1433
 <212> DNA
 <213> Homo sapiens

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 360

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 420
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 660
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 720
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 780
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
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His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35					40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
		50				55					60				
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65					70					75				80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
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	100							105					110		

<210> 3187
 <211> 860
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 caccatgcag aggtcgtgaa gaaggtgaat gagatgatcg tcacggggca gtatggcagg
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 360
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 420
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 720
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 840
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 860

<210> 3188
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3188
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 Asp Tyr Arg Tyr Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro
 20 25 30
 Glu Val Val Leu Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu
 35 40 45
 Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg

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      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
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<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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120
gactccccctt ctgggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
gacctcacca aagtgacctg gatgcatgga atcgacctg tgggtgctggt cctgatgggtg
240
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300
tgcttgetca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
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<210> 3190

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191
<211> 266
<212> DNA
<213> Homo sapiens

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120
aacagcagga caatccacac ttccgtagcc tcttgggggc ggccgccgag ccagcccggg
180
gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
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266

<210> 3192
<211> 84
<212> PRT
<213> Homo sapiens

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Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp
20 25 30
Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
35 40 45
Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
50 55 60
Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
65 70 75 80
Pro Ser Ala Ser

<210> 3193
<211> 567
<212> DNA
<213> Homo sapiens

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120
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360

gctggcctcg tgattcctct ctttccctgc aggccacggg tcacctactt ccccttctcc
420
ctggggccacc gtcctgcat cgggcagcag tttgctcaga tggaggtgaa ggtgggtcatg
480
gcaaagctgc tgcagaggct ggagttccgg ctgggtgccc ggcagcgctt cgggctgcag
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567

<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35					40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75				80	
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe
				85					90				95		
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
			100					105					110		
Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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120
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240
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420
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480

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 960
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<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50				55					60					
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65				70					75					80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
			85					90					95		
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
			115				120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
			130			135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145						150									

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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 5575

<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

Met	Ala	Thr	Leu	Asp	Arg	Lys	Val	Pro	Ser	Pro	Glu	Ala	Phe	Leu	Gly
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Lys	Pro	Trp	Ser	Ser	Trp	Ile	Asp	Ala	Ala	Lys	Leu	His	Cys	Ser	Asp
		20						25					30		
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
		35					40					45			
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
	50				55						60				
Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90					95	
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
		115					120						125		
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
145					150					155				160	
Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
				165					170					175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
			180						185				190		
Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

195	200	205
Thr Pro Pro Leu Ile Lys	Pro Val Leu Met Ser Lys	Ser Val Pro Pro
210	215	220
Ser Pro Glu Lys Ile Leu	Asn Gly Lys Gly Ile Leu	Pro Thr Thr Ile
225	230	235
Asp Lys Lys His Gln Asn	Gly Thr Lys Asn Ser Asn	Lys Pro Tyr Arg
245	250	255
Arg Leu Ser Glu Arg Glu	Phe Asp Pro Asn Lys His	Cys Gly Val Leu
260	265	270
Asp Pro Glu Thr Lys Lys	Pro Cys Thr Arg Ser Leu	Thr Cys Lys Thr
275	280	285
His Ser Leu Ser His Arg	Arg Ala Val Pro Gly Arg	Lys Lys Gln Phe
290	295	300
Asp Leu Leu Leu Ala Glu	His Lys Ala Lys Ser Arg	Glu Lys Glu Val
305	310	315
Lys Asp Lys Glu His Leu	Leu Thr Ser Thr Arg	Glu Ile Leu Pro Ser
325	330	335
Gln Ser Gly Pro Ala Gln	Asp Ser Leu Leu Gly Ser	Ser Ser Gly Ser Ser
340	345	350
Gly Pro Glu Pro Lys Val	Ala Ser Pro Ala Lys Ser	Arg Pro Pro Asn
355	360	365
Ser Val Leu Pro Arg Pro	Ser Ser Ala Asn Ser Ile	Ser Ser Ser Thr
370	375	380
Ser Ser Asn His Ser Gly	His Thr Pro Glu Pro Pro	Leu Pro Pro Val
385	390	395
Gly Gly Asp Leu Ala Ser	Arg Leu Ser Ser Asp	Glu Gly Glu Met Asp
405	410	415
Gly Ala Asp Glu Ser Glu	Lys Leu Asp Cys Gln Phe	Ser Thr His His
420	425	430
Pro Arg Pro Leu Ala Phe	Cys Ser Phe Gly Ser Arg	Leu Met Gly Arg
435	440	445
Gly Tyr Tyr Val Phe Asp	Arg Arg Trp Asp Arg Phe	Arg Phe Ala Leu
450	455	460
Asn Ser Met Val Glu Lys	His Leu Asn Ser Gln Met	Trp Lys Lys Ile
465	470	475
Pro Pro Ala Ala Asp Ser	Pro Met Pro Ser Pro Ala	Ala His Ile Thr
485	490	495
Thr Pro Val Pro Ala Ser	Val Leu Gln Pro Phe Ser	Asn Pro Ser Ala
500	505	510
Val Tyr Leu Pro Ser Ala	Pro Ile Ser Ser Arg Leu	Thr Ser Ser Tyr
515	520	525
Ile Met Thr Ser Ala Met	Leu Ser Asp Ala Ala Phe	Val Thr Ser Pro
530	535	540
Asp Pro Ser Ala Leu Met	Ser His Thr Thr Ala Phe	Pro His Val Ala
545	550	555
Ala Thr Leu Ser Ile Met	Asp Ser Thr Phe Lys Ala	Pro Ser Ala Val
565	570	575
Ser Pro Ile Pro Ala Val	Ile Pro Ser Pro Ser His	Lys Pro Ser Lys
580	585	590
Thr Lys Thr Ser Lys Ser	Ser Lys Val Lys Asp Leu	Ser Thr Arg Ser
595	600	605
Asp Glu Ser Pro Ser Asn	Lys Lys Arg Lys Pro Gln	Ser Ser Thr Ser
610	615	620
Ser Ser Ser Ser Ser Ser	Ser Ser Ser Leu Gln Thr	Ser Leu Ser Ser

625		630		635		640									
Pro	Leu	Ser	Gly	Pro	His	Lys	Lys	Asn	Cys	Val	Leu	Asn	Ala	Ser	Ser
		645		650		655									
Ala	Leu	Asn	Ser	Tyr	Gln	Ala	Ala	Pro	Pro	Tyr	Asn	Ser	Leu	Ser	Val
		660		665		670									
His	Asn	Ser	Asn	Asn	Gly	Val	Ser	Pro	Leu	Ser	Ala	Lys	Leu	Glu	Pro
		675		680		685									
Ser	Gly	Arg	Thr	Ser	Leu	Pro	Gly	Gly	Pro	Ala	Asp	Ile	Val	Arg	Gln
		690		695		700									
Val	Gly	Ala	Val	Gly	Gly	Ser	Ser	Asp	Ser	Cys	Pro	Leu	Ser	Val	Pro
705				710		715									720
Ser	Leu	Ala	Leu	His	Ala	Gly	Asp	Leu	Ser	Leu	Ala	Ser	His	Asn	Ala
		725		730		735									
Val	Ser	Ser	Leu	Pro	Leu	Ser	Phe	Asp	Lys	Ser	Glu	Gly	Lys	Lys	Arg
		740		745		750									
Lys	Asn	Ser	Ser	Ser	Ser	Ser	Lys	Ala	Cys	Lys	Ile	Thr	Lys	Met	Pro
		755		760		765									
Gly	Met	Asn	Ser	Val	His	Lys	Lys	Asn	Pro	Pro	Ser	Leu	Leu	Ala	Pro
		770		775		780									
Val	Pro	Asp	Pro	Val	Asn	Ser	Thr	Ser	Ser	Arg	Gln	Val	Gly	Lys	Asn
785				790		795									800
Ser	Ser	Leu	Ala	Leu	Ser	Gln	Ser	Ser	Pro	Ser	Ser	Ile	Ser	Ser	Pro
		805		810		815									
Gly	His	Ser	Arg	Gln	Asn	Thr	Asn	Arg	Thr	Gly	Arg	Ile	Arg	Thr	Leu
		820		825		830									
Pro															

<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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120
caagcagctc ccacagctgg cactggggaa cgtgggtgaca ccagaagct tggagatgcc
180
aggaaccgca agggcccaaa gagagtgtca cagccctggc ttagggagct cctaggtctg
240
ggctgcccga agagcaaggg ctcttccttc cttctttctt ttctccttct tgctacctgc
300
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360
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420
gtagagtgc caagacaaag aggagcttta ctgagtgcaca atagctcaga ggaggccctg
480
gagagggcag ttctcacta cagctgggtca tccgacgtct gctcagctct ggctgagcct
540
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600

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 660
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 720
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<210> 3200
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3200
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 Leu Leu Phe Gly Gln Pro Arg Pro Arg Ser Ser Leu Ser Gln Gly Cys
 20 25 30
 Asp Thr Leu Phe Gly Ala Leu Arg Phe Leu Ala Ser Pro Ser Phe Trp
 35 40 45
 Val Ser Pro Arg Ser Pro Val Pro Ala Val Gly Ala Ala Cys Cys Met
 50 55 60
 Pro Gly Pro Ala Thr Ala Ser Gln Arg Ala Gly Ala Leu Thr Ser Thr
 65 70 75 80
 Trp Ser Cys Leu Pro His Cys Ser Ser Arg Arg Val
 85 90

<210> 3201
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 3201
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 120
 gaagccgaca gcctttggga ccgaggtcag cagctgcacc ggcgcaagaa ttccaaacac
 180
 agctgtggct gaagggcctg ggggtgtgca ggtcccaaac ccagtgagc ctgatcccga
 240
 catgggtcct gtctcctggg ggccaccttt gtgtcccggtg gtggctgacc ctgagagggg
 300
 gggctgtggg gatgctcaca tgacactggg gtcccagcga cagccccctcc tcacgtctgcg
 360
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 390

<210> 3202
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3202
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Lys Gly His Ala Ala Gly Val Ser Thr Ala Lys Pro Thr Ala Phe			
	20	25	30
Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala			
	35	40	45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
	50	55	60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
	65	70	75
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
	85	90	95
Gly Ser Gln Arg Gln Pro Leu Leu Thr Leu Arg Val Pro Gly Ala Ser			
	100	105	110
Gln Glu Gly Arg			
	115		

<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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120
cacggtggca gcattgagag ttggacaccc gggtccttga agtgatctct aggccccagc
180
cccaaattcc ccaccattcc gtgctgcggg gacaccatgg ctccagaaga ggacgctgga
240
ggggaggcct tagggggcag tttctgggag gctggcaact acaggcgcac ggtacagcgg
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360
atcgagaagg cttatgccca gcagttggct gactggggcc gaaagtggag ggggaccgtg
420
gagaagggcc ccagtatgg cacttgagag aaggcctggc atgccttttt cacggcggtt
480
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600
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660
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720
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780
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840
acgctggcag agctgcatcg ctacactcca cgctacatgg aggacatgga acaggccttt
900
gagacctgcc aggcgcgcca gcgccagcgg cttcttttct tcaaggatat gctgctcacc
960

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ttacaccagc acctggacct ttccagcagt gagaagttcc atgaactcca ccgtgacttg
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 1080
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 1200
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 1320
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 1740
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 1800
 ttggggtgag tgtagttctg gcctagcagc accctcttgt ggcttggtct agcgtgtatt
 1860
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 1906

<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

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 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly
 20 25 30
 His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala Arg
 35 40 45
 Ile Glu Lys Ala Tyr Ala Gln Leu Ala Asp Trp Ala Arg Lys Trp
 50 55 60
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala
 65 70 75 80
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu
 85 90 95
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala
 100 105 110
 Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu

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      115              120              125
Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
      130              135              140
Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
      145              150              155              160
Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
      165              170              175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
      180              185              190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
      195              200              205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
      210              215              220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
      225              230              235              240
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
      245              250              255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
      260              265              270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
      275              280              285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
      290              295              300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
      305              310              315              320
Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
      325              330              335
Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
      340              345              350
Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
      355              360              365
Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
      370              375              380
Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
      385              390              395              400
Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
      405              410              415
Asn Tyr Val Glu Cys Val Gly Ala
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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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120
ctgttgacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg
180
gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccaggccc
240

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tatggccatg agatacccct gaggaacggg accctgggtg gtcctttgt cccccccagc
 300
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 360
 tcgggagaga gcagtgacca ggggtccccg acgcccaccc agcctctgtt ggagtctggc
 420
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct
 480
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc
 540
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 660
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 720
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 900
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 960
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 1020
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 1080
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 1200
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 1260
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 1320
 gtcgccagcg gcattgtccag tcccagtggg ggcagcaccg tctccttctc ccacactctg
 1380
 cccgacttct ccaagtactc catgccagac aacagcccgg agacgcgggc taaagtgaag
 1440
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 1482

<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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 20 25 30
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

2418

2419

<400> 3209

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 120
 gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg
 180
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
 240
 gtctgtcttg gcccggtgtg tcaccctgtg ttcattcttc tcccagccat ggcctctcaa
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<210> 3210

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3210

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			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
		35				40					45				
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50				55					60					
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65				70					75					80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
			85					90						95	

<210> 3211

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 3211

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 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
 240
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 300
 caaagaagac ttctccatg acagctactt tgggggccgc ctgcgtgggc agatcgccac
 360
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 420

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 660
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 720
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 780
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 900
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 960
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 1020
 gaagcagccg agcattggga aaagcaaagt tcaacaaac tctatgacag taaagaaggc
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
 ggacctggtg ctgagaagag tctgttcaca gccaaaattc tccactgt cattcctaac
 1500
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg
 1560
 atcaagttgt tccactggtg tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt
 1620
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt
 1680
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 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp
 1 5 10 15
 Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

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          20          25          30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
          35          40          45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
          50          55          60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65          70          75          80
Leu Ser Ser His Thr Glu Tyr
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<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcacggct ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaagat
300
gttggtaccga ttctaggaat tgaagcagga atctttcaga tacttcta
348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

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Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
          20          25          30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
          35          40          45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
50          55          60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65          70          75          80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
          85          90

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<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgaccagggg
 300
 accagcccg cccacctcag cacctgcggc ctgggcaccg gggaggagag cgcacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtctgcaca ccgggaagag gtggttcatc
 420
 atctgtccgg tgcttgagcc ccccgcccc gagggccctt gaattcttcg cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg cctataaag accagctgtc
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 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

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Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35				40					45				
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55				60					
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65					70				75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85					90						95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
			100					105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145						150									

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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120
accatacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
gatgtgggcc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatggt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatgtgag
360
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
ttgtaaaaca gaagttccag agcacagaag gtcacatca caagcaaact ttattaaaaa
600
aaaactagaa gtgtgctttg attttgtgtg tatttgtttt atcacttcta tatttggtga
660
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag
720
ccagagtga tgatactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
ttcaaaatct gaactttttt gagcactgac ttgacccac aagtggaaaa tccccacc
840
gacaccttg cttctgatg gttcagttta aacagatttt gttcttgca caaaattttt
900
gtataaatta ctttcaggct atatgtataa ggtggatgtg aaacatgaat tatgtaatta
960
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg
1020
tccttagcat tttggataag ggatactcag cttgtaccta tatattcata tatattcact
1080
gttgtagaa atgtttaagt tgctgttctg tgatgaatct aaatcttttc tcttgctacc
1140
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1200
gaaccatta atatcgtggc tatctgatta catatatatt ccaagatgaa cttttttta
1260
tatatgctaa aaattttggg gaatatgttt tgggatgtat tatggagcta aaactctaac
1320
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1380
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1440
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1560
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1620

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 1680
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 1800
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 1860
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 1920
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 1980
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 2100
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 2220
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 2280
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 2340
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 2400
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 2460
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg
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 2570

<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

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Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro	
	50					55				60					
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65					70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90					95		
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
		100					105				110				
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

115 120 125
 Glu Arg Met Lys Leu Glu Glu Gln Arg Arg Leu Leu Glu Glu Glu Ile
 130 135 140
 Ile Ala Phe Ser Lys Lys Lys Ala Thr Ser Glu Ile Phe His Ser Gln
 145 150 155 160
 Ser Phe Leu Ala Thr Gly Ser Asn Leu Ser Lys Asp Lys Asp His Lys
 165 170 175
 Asn Ser Asn Phe Leu
 180

<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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 120
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 180
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 240
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 360
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 420
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 480
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 780
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 900
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 1080
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 1140

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 1200
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 1241

<210> 3220
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3220
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 20 25 30
 Val Asn Gly Gly Xaa Val Thr Ser Glu Arg Glu Thr Asp Ile Leu Asp
 35 40 45
 Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr
 50 55 60
 Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro
 65 70 75 80
 Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met
 85 90 95
 Glu Pro Met Val Asn Gly Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg
 100 105 110
 Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr
 115 120 125
 Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro
 130 135 140
 Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser
 145 150 155 160
 Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro
 165 170 175
 Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly
 180 185 190
 Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro
 195 200 205
 Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser
 210 215 220
 Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro
 225 230 235 240
 Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu
 245 250 255
 Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala
 260 265 270
 Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser
 275 280 285
 Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro
 290 295 300
 Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly
 305 310 315 320
 Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly
 325 330 335
 Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

	340		345		350										
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe
	355						360					365			
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser
	370						375					380			
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr
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Ser	Asp	Pro	Ser	Arg	Thr	Pro	Glu	Glu	Glu	Pro	Leu	Asn			
			405					410							

<210> 3221

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 3221

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120
gcaggctgga aggagatgag atgccacctg cgcgccaacg gctacctgtg caagtaccag
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900
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960
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1080
gcagagggtg ccttgctgag ggtccccgt ctttgggctc tagtgatgca tagggaaaca
1140

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 1320
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 1380
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 1440
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 1560
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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35					40					45		
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
			50					55					60		
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
			65					70					75		80
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105					110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
			115					120					125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
			130					135					140		
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
			145					150					155		160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
			195					200					205		
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
			210					215					220		
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
			225					230					235		240
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

<211> 224

<212> PRT

<213> Homo sapiens

<400> 3224

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      20           25           30
Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
      35           40           45
Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
      50           55           60
Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
      65           70           75           80
Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
      85           90           95
Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
      100           105           110
Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
      115           120           125
Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
      130           135           140
Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
      145           150           155           160
Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
      165           170           175
Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
      180           185           190
Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
      195           200           205
Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
      210           215           220

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<210> 3225

<211> 506

<212> DNA

<213> Homo sapiens

<400> 3225

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120
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180
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240
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300
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360
accacaccgc ctttgagggt agccacccaa gatgcagggt gggctgtatg aaactccacg
420

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<210> 3226
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 3226
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 Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala
 20 25 30
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
 35 40 45
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
 50 55 60
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
 65 70 75 80
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
 85 90 95
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
 100 105 110
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
 115 120 125
 Pro Trp Arg Cys Pro Trp Phe Pro Met
 130 135

<210> 3227
 <211> 1623
 <212> DNA
 <213> Homo sapiens

<400> 3227
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 120
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 180
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 420
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 780
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 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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 Val Gln Val Gly Asp Ser Leu Arg Ala Ser Thr Ile Arg Lys Val Gln
 35 40 45
 Thr Glu Ser Ser Thr Gly Ser Val Gly Ser Asn Arg Val Arg Thr Thr
 50 55 60
 Leu Thr Leu Cys Val Glu Ala Ile Asp Phe Asp Ser Gln Ala Cys Gln

65 70 75 80
 Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
 85 90 95
 Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
 100 105 110
 Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
 115 120 125
 Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu
 130 135 140
 Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
 145 150 155 160
 Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
 165 170 175
 Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
 180 185 190
 Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
 195 200 205
 Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
 210 215 220
 Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
 225 230 235 240
 Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
 245 250 255
 Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
 260 265 270
 Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
 275 280 285
 Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
 290 295 300
 Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
 305 310 315 320
 Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
 325 330 335
 Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
 340 345 350
 Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
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 Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu
 370 375 380
 Asp
 385

<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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120

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180

aggcgggagg cgctgagagt ctgtgaggag gtccgtggac agactgcttt gctcgttggt
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 300
 cagccgacca ttatggaaga cggcaagcgg gagaggtggc ccaccctcat ggagcgcttg
 360
 tgctcggatg gcttcgcatt tccccaatc cccattaaac cgtatcatct gaagaggatc
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 780
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 900
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 1008

<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
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Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50				55					60					
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65				70						75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
			85					90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
			115				120						125		
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
			130				135				140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

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145          150          155          160
Ser Lys Asn Glu Tyr Gln Pro Leu Leu Leu Ala Val Ser Arg Arg Lys
          165          170          175
Val Lys Met Val Glu Phe Leu Leu Lys Lys Lys Ala Asn Val Asn Ala
          180          185          190
Ile Asp Tyr Leu Gly Arg Ser Ala Leu Ile Leu Ala Val Thr Leu Gly
          195          200          205
Glu Lys Asp Ile Val Ile Leu Leu Leu Gln His Asn Ile Asp Val Phe
          210          215          220
Ser Arg Asp Val Tyr Gly Lys Leu
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<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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180
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240
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420
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660
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780
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960
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1080

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 1200
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 1260
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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
		20					25					30			
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
	35					40					45				
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50				55					60					
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65				70				75						80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85					90					95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100					105					110			
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
	115					120						125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145				150				155						160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
		165						170						175	
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
		180					185						190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
	195					200						205			
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215					220				
Ala	Ser	Met	Arg	Arg	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His	
225				230				235						240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
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<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

<400> 3233

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 360
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 780
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<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

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 Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe
 20 25 30
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
 35 40 45
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
 50 55 60
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
 65 70 75 80
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

	85		90		95										
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys
	100		105		110										
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu
	115		120		125										
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu
	130		135		140										
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu
	145		150		155										160
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp
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Arg	Gln	Thr	Leu	Gln	Glu	Asp									
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<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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1020

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 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

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			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
			35				40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55				60					
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
	65				70				75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85					90						95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
			115				120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
	145				150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165					170					175		
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195					200					205				
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
	225				230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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 120
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 180
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 240
 aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
 300
 ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcgtt
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 420
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<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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		20						25				30			
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val
	35					40					45				
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val
	50				55					60					
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu
65			70					75					80		
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu
			85					90					95		
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala
		100					105					110			
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser
	115					120					125				
Val	Cys	Tyr	Trp	Thr	Leu	Gly	Leu	His	Pro	Glu	Val	Ala	Arg	Leu	Gly
	130					135					140				

<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc
 180
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 240
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 300
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 360
 cccacccagg caggagcggg gcctggcccc gggcaggcgg gtgggagagc tcaactgagt
 420
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<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

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Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65				70					75					80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
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<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 120
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 180
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 240
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 300

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 360
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<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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		20						25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
	35					40						45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
	50				55						60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65				70					75					80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
			85					90					95		
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
		100					105						110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
	115					120						125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
	130					135					140				
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145				150					155					160	
Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
			165					170						175	
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
		180					185						190		
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

195	200	205
Gly Ser Gly Lys Thr Gln Trp Ala Leu Lys Tyr	Ala Lys Glu Asn Pro	
210	215	220
Glu Lys Arg Tyr Asn Val Leu Gly Ala Glu Thr	Val Leu Asn Gln Met	
225	230	235
Arg Met Lys Gly Leu Glu Glu Pro Glu Met Asp	Pro Lys Ser Arg Asp	
245	250	255
Leu Leu Val Gln Gln Ala Ser Gln Cys Leu Ser	Lys Leu Val Gln Ile	
260	265	270
Ala Ser Arg Thr Lys Arg Asn Phe Ile Leu Asp	Gln Cys Asn Val Tyr	
275	280	285
Asn Ser Gly Gln Arg Arg Lys Leu Leu Leu Phe	Lys Thr Phe Ser Arg	
290	295	300
Lys Val Val Val Val Val Pro Asn Glu Glu		
305	310	

<210> 3245

<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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 180
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 240
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 360
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 420
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<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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20 25 30
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr
35 40 45
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
50 55 60
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu
65 70 75 80
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe
85 90 95
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile
100 105 110
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Asp Leu Thr Asp Ala Val
115 120 125
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr
130 135 140
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu
145 150 155 160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
165 170 175
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val
180 185 190
Glu Ala Ser Phe Pro Gln Leu Leu Val Tyr Glu Arg Leu Gln Gln Leu
195 200 205
Glu Leu Trp Lys Ile Ile Ala Glu Pro Val Thr
210 215

<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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120
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180
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240
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300

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 360
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 420
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 480
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<210> 3248

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

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		20						25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35					40					45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55					60				
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
65				70					75					80	
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
			85						90					95	
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
		100							105					110	
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
		115					120					125			
Arg	Ala	Gln	Ile	Phe	Arg	Arg	Asn	Gln	Ser	Leu	Val	Gln	Asp	Met	Asp
	130					135					140				
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
145					150					155				160	
Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
			165					170					175		
Ser	Ala	Arg	Ser	Asp	Leu	Asn	Pro	Ala	Asn	Gly	Ser	Tyr	Pro	Phe	Gln

	180		185		190										
Ala	Leu	Arg	Gln	Arg	Ser	His	Gly	Gly	Ile	Asp	Val	Lys	Val	Thr	Ser
	195		200		205										
Met	Ser	Leu	Ala	Arg	Ile	Leu	Ser	Leu	Leu	Ala	Ala	Ser	Gly	Pro	Thr
	210		215		220										
Trp	Asp	Gln	Val	Pro	Pro	Phe	Gln	Trp	Ser	Thr	Ser	Pro	Phe	Ser	Gly
	225		230		235										
Leu	Leu	His	Met	Gly	Gln	Pro	Asp	Leu	Trp	Lys	Phe	Ala	Pro	Val	Lys
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<210> 3249

<211> 4487

<212> DNA

<213> Homo sapiens

<400> 3249

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